

MARINE RECORD

ESTABLISHED 1878.

VOL. XX. No. 31.

CLEVELAND---AUGUST 5, 1897---CHICAGO.

\$2.00 Per Year. 10c. Single Copy

PROJECTED NAVAL STATION IN THE FALKLAND ISLANDS.

Under date of April 16, 1897, Consul Miller writes from Port Stanley, Falkland Islands:

Within the past few months, investigations of the harbor here have been made by the colonial government with the view of erecting a pier extending to a depth that will enable any vessel to discharge her cargo without the aid of lighters. It appears to be a certainty that this work will begin in the near future, and when completed will greatly assist in a more rapid and cheaper discharge of freight.

Colonel Lewis, of the Royal Engineers, under the direction of the Imperial Government, has been making soundings and surveys here with a view to the establishment of a naval station on the opposite shore from Port Stanley, with a pier leading thereto. This station would render communication with the outer world much more frequent, and would be of great assistance in towing distressed vessels into safety. The presence of ships of war here for the past six months clearly demonstrates this, they having brought in two merchant vessels, and, through the services of their divers, temporarily repaired one of them in a short time, and at reasonable rates. This work could not have been done at all without the importation of divers, as the divers here are not considered competent, and charge very high for their services besides.

In commemoration of the "longest reign," the erection of a hospital suitable for this port is being considered. This, I believe, will be of marked benefit to enfeebled sailors who may be dropped here, as there are no such accommodations in these islands.

SEAMEN'S BUREAU OF HAMBURG.

According to the consular report, the number of vessels owned in Hamburg at the close of the year 1896 was 295 sailing vessels, with about 3,390 men, and 389 seagoing steamers, with about 12,236 men; total, 684 vessels, with about 15,626 men, against 653 vessels, with about 15,105 men, in 1895. Finkenwarder deep-sea fishing craft, 158 sailing vessels, with about 474 men. There were shipped and discharged 3,383 vessels, with 75,982 men, and 688 Finkenwarder deep-sea fishing vessels, with 849 men; total, 4,071 vessels, with 76,831 men, against 3,779 vessels, with 73,739 men, in 1895.

Money handled under all accounts—owners' money, depository, dues, printing expenses, fines, expenses for transports home, inheritances, deposits, expenses of supervision, and office expenses—amounted to \$3,151,753.83.

The correspondences held concerning military matters amounted to 24,500, against 19,000 in 1895; concerning transporting home, law matters, death and birth cases, inheritances, shipping articles issued, matters of the Seamen's Bureau, accident cases, etc., 8,976, against 8,694 in 1895; summonses issued, about 1,200, against 1,400 in 1895; total correspondence 34,676, against 29,094 in 1895.

Permissions to ship on foreign vessels were issued to 907 Germans, viz.: American vessels, 4 cases; Danish, 42; British, 640; Dutch, 1; Italian, 20; Norwegian, 109; Austrian, 21; Swedish, 11; Russian, 13; Belgium, 43; Chilean, 3.

There were 31,843 men shipped on large vessels. Among those shipped, there were 30,958 on 671 steamers and 885 on 46 sailing vessels.

Among the 1,373 foreigners shipped were: Four Africans, 31 North Americans, 10 South American, 4 Belgians, 1 Chilean, 78 Chinamen, 251 Danes, 13 Britons, 6 Frenchmen, 1 Greek, 61 Japanese, 2 Italians, 29 Dutch, 59 Austrians, 147 Russians, 554 Swedes and Norwegians, 12 Swiss, 6 Spaniards, 77 East Indians, and 27 West Indians.

There were 238 deaths registered at the Seamen's Bu-

reau, of which 188 were seamen on German ships, 18 were German seamen on foreign ships, and 32 were passengers on German ships.

The 188 case of death of seamen on German ships were distributed, according to nationality, as follows:

REPORT UPON PREVENTION OF STORMS.

Consul Stephan writes from Annaberg, May 24, 1897: "It appears from American newspaper clippings, which I received two days ago, that I have been universally credited with a report upon a rain-preventing experiment in Austria. I beg to state that I have never transmitted to the Department a report of this kind, and I presume that a slight mistake has occurred somewhere."

The report referred to by Consul Stephan is that made



PHILIP HICHBORN, NAVAL CONSTRUCTOR, U. S. N.

by Consul Germain, of Zurich, dated April 14, 1897, entitled "Prevention of hailstorms by means of explosives," printed in Consular Reports No. 201 (June, 1897), p. 321.

BETHEL WORK.

While good bethel work is being carried on at lake ports and notably that of the Floating Bethel at Cleveland, we find from a report of the "Bethel Home Record" Bay City, Mich., that Chaplain R. N. McFarland is in no way behind the times in holding forth the good things of the next life to those who most need to hear of the future in store. Seamen, boatmen, railroad operatives, lumbermen, fishermen and others of similar avocations are reached by the Bay City Bethel Mission and there can be no doubt but that a good and grand work is being carried out by the able superintendent at that port.

It is stated that at one meeting there were twenty-four cities, ten states and four countries represented, a feature which speaks for itself in the dissemination of good news. Of course the Bay City Bethel Mission is open to receive proper assistance, and, although the general run of people find enough to do to keep up local institutions, yet there is sometimes "a shot in the locker" to spare for even outsiders and strangers who are practically within

our gates. Furthermore, it is certain that if the marine fraternity will not support their own special works, exclusively shore people can not be approached so cheerily or expected to be the sole contributors in the maintenance of work carried on for the benefit of a different class or calling.

POSSIBLE STEAMSHIP SERVICE BETWEEN NEW YORK AND TANGIER.

Consul Burke sends the following from Tangier, June 21, 1897. In view of the opportunity for developing considerable trade between New York and Morocco if steamers touched at this port, I wrote during the past winter to two New York agencies of steamship lines to the Mediterranean to ascertain if it would not be possible and profitable for the companies to include Tangier in their itinerary. The agents of one of the lines informed me it would not be to their advantage, especially as the larger number of passengers by their line did not care to touch at Tangier. The agents of the other line wrote me they would refer my letter to Messrs. Gastaldi & Co., the general agents at Genoa. I also wrote other parties in the United States, asking them to be good enough to interest themselves in the matter, as I felt sure that if steamers touched regularly at this port both from and to New York it would result in our gaining a strong commercial foothold in this country. Whether my efforts in this direction accomplished anything I do not know. I am rejoiced, however, to be able to report that the steamer Sarnia of the Atlantic Line to the Mediterranean, of which Gastaldi & Co. are general agents, is advertised to touch at this port on July 2, en route to New York. I understand this is an experiment only; but there is no doubt in my mind that if we have even a monthly service for a few months it will be found necessary, on account of the increase of trade, to establish a bimonthly service for this port. All interested in getting a share of this market for our manufactured products should give aid and encouragement to the proposed venture, in order to render it a success. I have written Messrs. Gastaldi & Co., of Genoa, assuring them that whatever can be done by me shall be done to aid the undertaking. Now, whatever is shipped to the United States goes by way of England, Germany, and France. Whatever is brought from the United States must come through the same countries and must of necessity occupy a much longer time in transit. Probably the freight charges are higher when goods are brought in this roundabout way. If the company decides to have a monthly service for this port, our manufacturers and merchants should put commercial travelers in this field at once with samples of their products. A sample house should be opened, with a man at the head who is active, enterprising, and shrewd. He should be a man who knows the country and the people, not only of Tangier, but all the coast towns. The whole of Morocco would be his field, and our people would reap benefit. I sincerely hope that the experiment by the Atlantic Line Company in touching at this port will prove successful for them and beneficial in opening a new channel of trade for us, though it may not be very extensive.

A LAKE ERIE DANGER.

Branch Hydrographic Office, Cleveland, O., Aug. 3.

The branch Hydrographic Office has received the following information:

The Dominion cruiser "Petrel," Commander E. Dunn, commanding, had recently made a thorough examination of the location of the wreck of the schooner "Adams," which was reported blown up and removed, leaving twenty-five feet of water. The "Petrel" found as little as fourteen feet of water, and left a small white flag buoy about the center of the wreck.

NEWS AROUND THE LAKES.

DETROIT.

Special Correspondence to the Marine Record.

On account of a recent collision the barge Keepsake has been given a new stern and other repairs at this port.

While business has been rather slack along the river front it is now beginning to pick up again and vesselmen look for much brighter times from this on to the end of the season.

The resignation of W. A. Livingstone as agent at Detroit for the Anchor, Western and Union steamboat lines, handed in a month ago, has been accepted. He recommended as his successor, P. D. Burke, his chief clerk, and his recommendation was duly endorsed. Mr. Livingstone will take a trip to Europe and enjoy a well deserved vacation from business.

The Enquirer, W. J. Connors' steam yacht, passed down the river here the other day and she was given quite an ovation. She is the speediest yacht afloat up to the present and great credit is due to her builders, the Union Dry Dock Co., of Buffalo. The engineer of this craft is also one of the most skilled mechanics working on the lakes, and he handles the machinery of the little clipper in first class style.

As an indication of how the excursion business is run on the lakes, I quote the excursions booked by Ashley & Dustin for this week, as follows: Monday, Catholic Rifles on the Kirby; Tuesday, Bowling Club on the Kirby; First Presbyterian Sunday school on the Wyandotte; Thursday, Harmonie society on the Kirby; John Harvey mission on the Wyandotte; Friday, Grand River Ave. Presbyterian church on the Wyandotte; Saturday, J. H. Bishop employes on the Wyandotte. The excursion business, as well as some of the regular liners may be said to receive a more distinct and living patronage from parties like the foregoing than from general, floating or miscellaneous passengers such as usually keep other passenger lines running from port to port. In course of time when the traveling public gets educated up to this method of moving from place to place the regular lines of passenger steamers will not need to look for these special parties and charters.

BUFFALO.

Special Correspondence to the Marine Record.

The steamer Folsom damaged her stern while in port this week through getting foul of a scow.

The steamer Portage brought in the anchors and chains of the sunken steamer Grand Traverse, besides some of the general outfit.

This week the ore-laden steamer S. S. Curry passed up Buffalo Creek drawing 18 feet aft, and did not drag until after she had gone through Michigan street bridge.

The fairly good draft of 14 feet 6 inches may now be carried into Tonawanda; at least that was the draft of the Wilhelm when she went down there this week.

The new elevator at Black Rock will be ready for business soon after the middle of the month. The structure is finished and the machinery is now being set up.

The steamer Shenandoah of the Davidson fleet, has been ordered to Bay City for a calking job and the Algeria will now tow with some other steamer of the same line.

Frank E. Kirby, of the Detroit Dry Dock Co., was at Montreal this week to confer with the directors of the Richelieu & Ontario Navigation Co. respecting two fast steamers which the company proposes to have built for next season's tourist trade.

The Erie Canal is doing somewhat better this week, but on the whole the season has been a loser for canal boatmen. I would say let the Federal power take hold of the Erie Canal and make it a national waterway, clear of the state of New York entirely, then we might see some commerce traveling this way.

Changes have been made in the Western Line as follows. Capt. Jones, of the steamer Mohawk, has retired. Capt. Robert Murray, of the steamer Arabia, has been appointed commander of the Mohawk, and John Davis, the mate of the Mohawk, has been appointed captain of the Arabia.

Capt. Geo. McLeod reports from Port Huron that the Canadian passenger steamer Cambria is not much damaged after her somewhat severe stranding and that after being thoroughly searched up and re-calked she will be as good as formerly. Much credit is due Capt. George for his excellent work on this otherwise total loss.

The Lehigh Valley Line are also picking up more business and the Oceanica as well as the Tacoma get away this week. If there is anything made by the judicious handling of floating property, Capt. Henry, manager of the line knows it and he does not start out his wooden vessels a day too soon. I may say, however, that he is likely to catch on later in the season and when he does it will be for a winner of freights for his company.

The new Union liner Starucca is to be launched at the Union shipyard at 4 o'clock Thursday. She is a fine steel hull and will be for the most part a sister ship of the Ramapo of the same line, though she is six feet longer. Capt. Robinson brought in the Ramapo on Tuesday and he now remains here and takes charge of the new boat. Capt. McDonald, from the Rochester, who is to sail the Ramapo, made the round trip and is now in charge of her.

In the race last week between the Enquirer, W. J. Connors' yacht, and the Pathfinder, of Chicago, the Enquirer

covered the distance of eighty-five miles in four hours, seventeen minutes and forty-five seconds. The Enquirer was built by the Union Dry Dock Company under the direction of Edward F. W. Gaskin, and her owner says that she is a great credit to that concern, and a big card for the city of Buffalo, as she can out steam any yacht on the lakes, having cleverly downed her last competitor.

Capt. Campbell of the Detroit Ferry Co. is down here looking the ground over with a view to bringing down the seamer Promise or some other excursion boat. It is said that the Promise draws considerable more water than is to be had at either Crystal or Woodlawn Beach, so that it is useless to talk of such a thing. Besides it is quite generally the idea that there are excursion boats enough here now to take care of the visitors and populace, unless they patronize the water routes more than is expected.

It is reported this week that the fire insurance companies have agreed to cut 50 cents on the contents of grain elevators and 25 cents on the building itself. The elevator pool appointed a committee to confer with the underwriters, and try to come to some settled agreement which would be binding for both parties. After wrangling for several weeks the fire insurance companies agreed to cut rates. If they had not done this the pool would have raised a substantial sum to insure against losses incurred by fire. But this was not found necessary.

The Mills Dry Dock Co. report rather a dull season up to date but there is somewhat of a rush on just now. They have now in hand the steamer Minnie E. Kelton for bottom work and a new shaft, barge George B. Owen for extensive repairs from striking on Ballards Reef. Steamers Wissahickon received new stem, etc. Columbia docked for bottom calking, Escanaba new stem, etc. City of Paris new cabins, the former one having been destroyed by fire. Lehigh dry docked and received a new mast. Work has also been completed on a number of tugs, scows and dredges, also small repairs to many vessels not requiring dry docking.

CHICAGO.

Special Correspondence to the Marine Record.

Capt. John Prindiville chartered the steamer Oscar T. Flint for wheat to Sandusky at 1½ cents.

Capt. James A. Calbick left here Sunday night for Buffalo to survey the damage on the barge George B. Owen, recently stranded on Ballard Reef.

Capt. O. E. Hogobaum intends converting the schooner Rising Star into a barge. Her center-board box will be taken out and she will in future carry but two masts.

J. J. Rardon & Co. chartered the steamers John F. Eddy for corn to Port Huron at 1 cent; City of London for corn to Erie at 1 cent, and Aragon for corn to Prescott at 2½ cents.

The fine steel steamer Crescent City, recently built by the Chicago Shipbuilding Co., proved herself a cargo record breaker, she having loaded last week at South Chicago 225,000 bushels of corn.

J. A. Calbick & Co. chartered the steamer George Hadley for oats to Buffalo at 1½ cents; the steamers Isabella J. Boyce and W. P. Ketcham and the schooner George J. Boyce for lumber, Marquette to Chicago, at \$1.37½ per M. feet.

Capt. George W. Pardee has been transferred from the steamer City of Holland to the steamer Soo City, to succeed Capt. Michael Driscoll, deceased. Mate James Snell of the steamer City of Holland will command that boat and Capt. Thomas Nelson will succeed him as mate.

H. W. Cook & Co. chartered the steamer Simon J. Murphy for corn to Lake Ontario at 2½ cents free of tolls. Steamer W. H. Wolf for clipped oats to Buffalo at 1½ cents; the schooner Minnie Slawson for dry lumber, Empire to Chicago at \$1.00 per M feet; steamer Westover and consort Bliss for lumber, Manistique to Chicago at \$1.00.

At the Chicago Shipbuilding Co.'s shipyard the Anchor Line steamer Susquehanna went out of dry dock Sunday after receiving extensive repairs. The steamer Erin is at the dock receiving a new rudder and a new shaft. The steamer Simon J. Murphy and schooner F. L. Danforth are receiving some minor repairs. W. I. Babcock, manager of the Chicago Shipbuilding Co., arrived in New York from England on the steamship Lucania last Friday. He is expected here about August 10th.

An examination will be made this week of the boiler of the steam yacht Pathfinder, which raced last week against the Buffalo yacht Enquirer, to determine whether her boiler was ruined in the race. It will be remembered that the Pathfinder withdrew from the race off Waukegan on account of some tubes in her water tube boiler having blown out. It is claimed by the crew of the boat that the boiler was not up to standard, and her owner, F. W. Morgan, proposes to settle the matter definitely. A representative of the firm which built the boiler will be present and the tubes will be given a test with hydrostatic pressure, a pump having been taken on board the yacht for this purpose. It is stated by many that the boiler is a wreck and must come out, and in such a case it would not be surprising if the affair took a legal turn.

CLEVELAND.

Special Correspondence to the Marine Record.

Surveys and repairs on damaged floating property has been the order of the day for the past week.

The steamer Santa Maria and her consorts were chartered this week at 50 cents, Escanaba to Tonawanda.

Mr. John Gordon, manager of the Great Lakes Steam-

ship Co., Buffalo, visited this port on Wednesday.

Capt. J. W. Moore has left in his yacht Marietta for a Lake Superior cruise. Capt. Clint Ennis, late in the Bessemer Line, has gone along with him.

Senator M. A. Hanna is off on a trip to Georgian Bay in his brother's yacht, the Comanche. H. M. Hanna, owners of this handsome little steamer, is president of the Globe Iron Works Co.

The steamer Selwyn Eddy, which was in collision with the steamer Mariposa on Lake Superior last week, came in from Ashtabula Monday and was towed to the yards of the Cleveland Ship Building Co. She will be here all week.

Owing to the wash-out on the railroads from the iron ore mines shipments have been light from the head of the lages for the past few weeks; they are now picking up again and charters on to September have been made this week at 60 cents.

Capt. O. Olson, late master of the Rappahanock, objects to the report that he ran into or in any way damaged the Mecosta, as reported in drydock for repairs at the Ship Owners' dry dock. The captain says he has not been within a hundred feet of the Mecosta all season.

The many grounding casualties during the past week or two have had the effect of masters being given instructions to be more careful in loading their vessels and so that they will be able to cross the shoalest places without grounding the steamers. While the underwriters make good the damage, there is always detention and loss to the vesselowner after each serious case of grounding.

Brisk shipments of grain are certain to eventuate from the head of the lakes from this on. It is known that a large quantity has already been contracted for at 2 cents, September, and 2½ for the early part of October, but it is also certain that a better rate will prevail for spot tonnage during these months and I would say that owners at this time should not tie up for less than 2½ to 3 cents per bushel for fall delivery.

The naval reserve corps of this port purchased the old and obsolete revenue cutter Andrew Johnson for a mere song. The boys are now off on a lake cruise, or at least, those of them who could get away from business. They have purchased a white elephant and will be glad to get clear of her in a year from now. A suitable shed with all the necessary paraphernalia and accouterments should have been erected on the lake front to fill this bill, and, as a drill shed it would have been found all sufficient. Mr. Pond may bite his fingers later, in the meantime the upkeep of the Johnson goes on.

At last the boiler for the Empire City has reached here after the new steamer has been laying weeks waiting. Freights have ruled low and the vessel could not have earned much if at work even a month ago, but, unless the makers of these Babcock & Wilcox boilers fill their orders more promptly it is likely that lake shipbuilders and owners will fight shy of them. A boiler firm of their standing should know how to fill an order when they take it, otherwise, a few thousand dollars may be lost to the contractor, viz., the owner of the ship.

The canal steamer Beta and barge No. 8 of the Cleveland steel canal fleet, which have been trading between this point and New York, will take oats to Bridgeport, Ct., on her next trip. The barges will be dropped at New York. The canalboats will carry a large amount of grain from Lake Erie ports to the coast this fall. The steamer Gamma takes this week two big rudder frames, which were turned out by the Cleveland City Forge & Iron Co., for the United States steamers now building. Each frame weighs 15 tons and could not very well have been shipped by rail.

The D. & C. Line will raise their rates to Detroit this week, the change taking effect on Friday morning. The reason given for the raise is that the management desires to save loss on coal bills, the old stock of coal being exhausted and the price of recently purchased stock being a dollar per ton higher than before. The rates between Detroit and Cleveland on and after Friday morning, will be 50 cents each way on the day boat, \$1 each way on the night boat, except on Saturday nights, when a round trip rate of \$1 will be in effect. Berths will probably remain at present prices for a while yet, but will probably be raised later on. Every effort is being made by the management to maintain the efficiency and high standard of their service.

The local branch of the Weather Bureau, Department of Agriculture has issued the weather, summary for the month of July, from which it appears that the mean temperature was 74 degrees; the highest was 97 degrees on the 4th and the lowest 56 degrees on the 14th. The mean temperature for this month for twenty-seven years was 72 degrees. South was the prevailing direction of the wind last month, the total movement being 7,984 miles, maximum velocity 39 miles an hour from the west on the 5th. The total precipitation was 2.48 inches. July had ten clear days, fourteen were partly cloudy and seven cloudy. Such is the record.

It would appear as if the Calumet in charge of the boarding officers at Chicago was endeavoring to make a ripple among vessel owners. This week the Queen of the West was fined about \$1,500 in all for not having a name painted on the deck buckets and other paltry items of the same sort. Of course the fines will be reduced after the usual presentations are made to the Treasury Department, but, it is simply rot to hold a vessel liable on such ignorant and useless pretenses. It would be much better not to have names splattered around so much as in the event of a deck pail being washed or dropped overboard it would no doubt be picked up, duly reported, and in some instances would

keep people guessing where the vessel herself was or ought to be. Dozens of these equipment inspection clauses should be wiped out altogether, as no doubt they will be when owners get together on the subject.

In reply to an application made to the treasury department by the owner of a vessel which uses gasoline for fuel and thought not to require a regularly licensed steam engineer, Secretary Howell replied to the letter stating that the exemption asked for in the application was refused. The department, Secretary Howell said, could not make an exception in this case, but realizing that there were many such cases on the Great Lakes he would refer the whole matter to the next annual meeting of the supervising inspectors of steam vessels with a request that some suitable regulation be drafted for the handling of vessels which used gasoline, naphtha, oil, or other liquid fuels.

It is not usual that a birth should occur on a trip of only a few hours' duration, but such was the case this week on the line steamer between Buffalo and this port. "State of New York" Weller, for that is what they call him for want of another name, is one day old and apparently at peace with all the world. He opened his eyes about 1 o'clock on Sunday morning. "State of New York" is a boy, and he was born on the boat of that name on Lake Erie. His mother's name is Mrs. Weller. She was en route to meet her husband, who is a lake captain. The company reserves the right to name all babies born on board its boats, and that is how the singular appellation was bestowed upon Mrs. Weller's babe. Duncan McIntyre, the purser of the boat, and Steward Boyd did everything they could for "State of New York" and his mother, and when the steamer arrived at this port, Mrs. Weller, under the charge of Dr. Chatfield, was taken to the Cleveland General Hospital in Black & Wright's ambulance. Patrolman Fife took charge of her baby, who cooed and crowed and kicked until the big policeman threatened to use his handcuffs. Late on Sunday night the attendants at the hospital reported that "State of New York" was still creating a violent disturbance by insisting upon falling out of bed and testing the power of his lungs. The navigation company will do something handsome by the baby born under these singular auspices.

FLOTSAM, JETSAM & LAGAN.

Astabula ore receipts show 60,000 tons less than a year ago.

Capt. Charles Tuft, in command of the life saving crew at Ludington, has retired, and is succeeded by Capt. Peter Jensen, of Pentwater.

The engines of the steamer Presley went through themselves off the South-east bend this week, but nobody was hurt. The steamer was towed to Detroit by the wrecker Saginaw.

Complaint has been made in regard to several unlighted clusters of piles in East Tawas Bay, placed there by the Saginaw Bay Towing Co.

Ore shipments from Duluth, Superior and Two Harbors up to Aug. 1 were 2,657,629 tons, as against 2,273,398 tons the same period last year. It is estimated that 3,000,000 bushels of wheat has been chartered from Duluth for the latter half of September at 2 cents and 2½ cents for October.

Captains who come past Ballard's Reef in working hours say that the Government boats are bringing to the surface great boulders half the size of a flag shanty almost within arm's length of the passing vessels, and it is asserted that the channel is not half cleared, even according to the published reports and sounding as given by the Government officials.

The steamer Thomas Davidson struck on Ballard's Reef in Detroit River on her recent upward trip, and is in the Milwaukee dry dock for repairs. She will require about 175 running feet of bottom plank, a new wheel, and calking from keel to rail. Her shoe also needs fastening, and a new pintal must be placed in the rudder. The Davidson will occupy the dock for fully one week.

Well! I see that the item I sent you from the Boston Post relative to the schooner Ira Laffrinier, of Deer Island, Me., Capt. Pomeroy, has gone the rounds of lake papers and without giving me any credit for showing where lake schooners get to on our down East coast; however, the Laffrinier is likely to live quite a while yet and to further herald lake shipbuilding in the early sixties.

Insurance agents are groaning every time Ballard's Reef is mentioned. They look for a new loss every half hour. One of them said yesterday that the present condition of things there was good for \$50,000 a week, and that a considerable part of it had been earned already, says the Buffalo Enquirer. There is not a little talk of carelessness and speculation over the wholesomeness of a commission to fix the blame of such accidents, but that is as far as it goes. The losses are paid all the same. It is to be hoped that the operations there will be finished at an early day. "Loading too deep," is the cry from the insurance officers.

Capt. McCormick, owner of the steamer Katahdin, who reached Prescott, Ont., to look after his steamer, objects to the report from the St. Lawrence that she wet a great part of her wheat cargo on her trip to Prescott. He says that the grain was out in one of the Western freshets and was in a damaged condition when it was loaded into the steamer at Chicago. The elevator at first rejected the grain, but on explanation being made it was all taken. Capt. McCormick says that the accommodations at Prescott are very poor. There is one large elevator there with a single leg and that is all. When the Katahdin arrived, there were half a dozen boats waiting to unload.

The Detroit & Cleveland steamboat line has a little salvage claim against the steamer Pilgrim, of which no mention has yet been made. Just after leaving Sand Beach recently, bound up, the steamer City of Alpena was hailed by a lifeboat from the Point Aux Barques station and notified that the Pilgrim had lost her rudder and was rolling in the trough of the sea with many passengers aboard. She was picked up by the Detroit and Cleveland Steam Navigation Co.'s steamer City of Alpena and towed into the harbor.

The bar in the St. Clair River at the mouth of Black River, off Port Huron, has not been removed because of accident to Edmund Hall's dredging plant, but Col. Lydecker says Mr. Hall will probably finish the job this summer. He advises the war department that this shoal is a good one to keep an eye on, as it is apt to encroach upon the main channel, as it no doubt certainly will if not regularly dredged. The Colonel also says that the timber superstructure at the Sand Beach Breakwater is in an advanced stage of decay, and the main breakwater so weakened as to make it liable to be carried away by any severe storm. He thinks it should be rebuilt of masonry, or he might have suggested concrete.

A Harbor Springs dispatch says: Capt. James Reid has thus far made no attempt at a general lift on the Cayuga, although he raised her bow several feet in order to place chains in position for the steel pontoons. He has placed seven pontoons thus far, and only one more remains to be taken out. One of the divers has stated that, weather permitting, everything will be ready for a trial lift inside of two weeks. It is a difficult matter to ascertain what progress the wreckers are making, for the reason that Capt. Reid is inclined to keep information concerning his movements and prospects from the marine fraternity. It can safely be stated, however, that he will attempt a lift soon. In the event of success the Cayuga will be brought into the bay near Harbor Springs.

The sky pilot, Capt. Bundy, is this week at Escanaba. The Chaplain is one of the widest known men on the shores of the great lakes and there is hardly a port where he has not preached. His work in this line extends over a period of twenty-two years, during which time he has had three vessels. The first, a small sailing craft, soon proved inadequate, and a commodious steam yacht was his next venture. This was constructed at a cost of \$11,000 and just met the demands of his calling, but the period of depression which struck the country a few years ago made it necessary to dispose of the craft. Since then the gospel pilot has made his tour of the lakes in a small schooner, there being one man aboard besides himself. Each of Capt. Bundy's boats were named the "Glad Tidings," appropriately for what he is supposed to herald.

THE MARINE HOSPITAL SERVICE.

The United States Marine Hospital Service which will soon celebrate its centennial anniversary, is the most distinctively American institution in our country. There is nothing exactly like it abroad, and foreigners, endeavoring to comprehend its scope, are constantly confusing it with the naval service. It is, on the contrary, one of the important branches of the Treasury Department, and was established, in 1798, in the interests of the merchant marine, by placing a tax of twenty cents a month upon the wages of every seaman employed upon United States vessels of commerce, and using the fund thus derived in affording hospital relief to their sick and disabled. The nucleus of this benevolent system was formed in Boston by providing for the care of patients at local hospitals and the appointment of a physician to look after their welfare. Subsequently Congress appropriated \$15,000 for the erection of a hospital building for the port of Boston; but the first marine hospital owned by the Government was obtained by purchase, in 1880, and was located near Norfolk, Va.—Joanna R. Nicholls, in August Lippincott's.

MORE STUPIDITY.

Two passenger steamers, the America of the American Line and the Algerian of the Richelieu & Ontario Navigation Co., collided on Monday night in the Lachine Rapids of the St. Lawrence River, near Montreal. Both were crowded with passengers and a panic ensued when the two craft came together. Above the roar of the rapids came the grinding and splintering of wood as the two boats dashed down the rapids together. Many of the passengers fainted. By a miracle, seemingly, no one on either boat was injured and the damage to both boats was comparatively slight, when the peril they were in is considered. The bulwarks of the America, on the side she struck the Algerian, are torn away and the woodwork is otherwise damaged. The Algerian, being the larger and heavier boat, escaped serious damage. As soon as the end of the rapids was reached the steamers were headed for docks and the passengers disembarked, glad to be on solid ground. The collision is regarded as strange by marine men, and they also say that it might have resulted much worse than it did. This is considered the effect of too zealous a competition and both masters ought to be severely hauled over the coals. It is safe to say that the master of the Algerian will need to explain his conduct from a seamanlike standpoint, but the master of the American steamer is likely to go "Scot free," as the inspectors in the United States never inquire.

IMPROVEMENTS AT ST. MARY'S RIVER.

Plans and estimates which were recently submitted to the War Department for the prosecution of additional improvements in the channel on St. Mary's River have been approved, and proposals are now being advertised for.

While the work is by no means as extensive as that heretofore done, yet it means the expenditure of approximately \$500,000 and the employment of several dredges and a large force of men.

The operations involve the excavation of 600,000 yards of rock and earth. It is possible that some of the work may be undertaken and completed before snow flies. A portion of it will require more time, probably the greater part of next year, to finish.

The improvements include the widening of the channel through the Round Island shoals this side of Bay Mills, from 300 feet, the present width, to 800 feet. Through the Middle Neebish the channel will be widened to 500 feet, the present width being 300 feet. The depth will also be increased to 21 feet at the Neebish, it being 18 feet at the present stage of water.

This will give a uniform depth of 21 feet throughout the river. The new improvements are in every way necessary, and will be hailed with pleasure by the vesselmen. Much trouble has been experienced at the Neebish and Round Island owing to the narrowness of the channel.

All interests are one in believing that the War Department through its corps of engineers, is doing all that is possible for the improvement of rivers and harbors on the lakes.

MARITIME LAW.

THE MEXICO.

In re COMPANIA TRANSATLANTICA.

(District Court, S. D. New York. Feb. 10, 1897.)
Collision—Steamers—Porting When Green to Green—Fault.

The Nansemond, on a course NNE., crossed, from port to starboard, the course of the Mexico, bound N. 70 degrees W., at least a half mile or a mile away, and brought the lights green against green. The N. then "ported a little," "ported a little more," and when several points on the M's starboard bow, less than a minute before collision, "hard a-ported," showing her red light, and soon collided with the M's starboard side. Held, the N. was in fault for porting when the vessels were green to green, her last order being one of extreme recklessness.

Reversing Gear Clamped—Fault.

The N. had the reversing gear of her engines clamped fast to the rock arm, so that from one to five minutes was required to release it after notice to reverse. In consequence, the masters' signal to reverse his engine could not be obeyed. Held, a gross fault.

Omission to Stop and Reverse—Situation in Extremis.

On seeing the green light of the N. suddenly change to red off the starboard bow, and, less than a minute before collision, the M. hard starboarded, and kept on at full speed, as the only chance of avoiding collision. Held, the situation was in extremis, caused by the faults of the N.; and whether the course taken was actually the best possible or not, the M. was not in fault for the result.

Fault of One Being Clear, Proof of Contributory Fault

Must be Clear and Convincing.

When the faults of one vessel are clear, the evidence of contributory negligence on the part of the other should be clear and convincing. Any reasonable doubt of the propriety of her navigation should be resolved in her favor.

This was a petition for limitation of liability, filed by the Compania Transatlantica, owner of the Mexico, for damages amounting to \$158,226.31, caused by the total loss of the steamship Nansemond and her cargo, in a collision with the Mexico, off the coast of Venezuela, and near the Island of Oruba, on December 21, 1895. The value of the Mexico and of her pending freight was fixed in the limitation proceeding at \$60,754.88.

A decree should be entered finding that the Mexico was without fault.

Brown, District Judge.

A BRIGHT AUSTRALIAN IDEA.

Our contemporary, Transport, London, has the following:

One of the greatest curiosities in literature that I have come across lately is in the form of a letter to the Brisbane Courier, written by a correspondent at Toowoomba, on the Darling Downs. This correspondent notices that the steamer Duke of Devonshire had collided with some unknown object and had to be run aground to prevent her sinking. Had she been any great distance from land, the probability is that there would have been a serious loss of lives, as it was reported that the pumps were unable to cope with the inrush of water. "This," says the correspondent, "is a frequent occurrence. It is well known that water will flow through an opening into a ship when she is afloat, but it does not seem to be known it will also run out if the outlet be made in the proper place. It is one of Nature's laws that wherever water will run in it will also flow out. It invariably ebbs and flows, comes and goes when a ship is at rest." Were this marvellous authority correct, there would, it is almost needless to say, be no such thing as disaster at sea, because wherever there is an aperture which will admit water you have only to make another hole to let it out again. The idea is simply absurd. Even a child knows better than that. The correspondent who presents to the world this striking display of knowledge nautical is Mr. M. P. Ducleby, of Toowoomba.

The foregoing will no doubt be quite a wrinkle for lake mariners.

A REPETITION OF LAKE HISTORY.

The Inland Ocean, Superior, Wis., this week quotes briefly from a very readable article in the July Midland Monthly by F. W. Fitzpatrick, who formerly lived in Duluth, on "Our Inland Seas":

On Lake Superior, one day last summer, I noted that we met twenty-eight vessels in about twelve hours. As to how many passed by when I was at meals—which were many and long, as are steamer meals usually—I have no record.

That night we passed through the old lock at the "Soo" at 11:58, and the superintendent of the canal informed me that our steamer was the one hundred and nineteenth that had passed through the canal in twenty-four hours, "and," he added, "if Capt. ——— hadn't been so blank-blanked slow with his old tub, I could have made it an even hundred and twenty!" (I of course, did not inform him that his humble servant had steered the "old tub" through the canal.)

One can but wonder what Father Marquette would have thought of such a day's record. To me Father Marquette is associated with all that is interesting about the Great Lakes, as being the first white man to leave any record of his discoveries on their shores, or to found anything like a permanent settlement at what was to become, in our time, the key (as well as the lock) to the main artery of our country. True, other explorers had preceded him. The waters of Superior and Huron had been seen by French explorers and missionaries as early as 1620. The Jesuit missionaries, Jolques and Raymbault, planted a cross and preached to the Hurons on the shores of Lake Huron in 1641. Two fur traders having wintered on the shores of Lake Superior in 1658 where, presumably after the manner of their kind, they dispensed limited quantities of fire-water to the red men in consideration of unlimited quantities of skins or peltries. But all these left scant records of their discoveries. It was Father Marquette who, in 1668, established the first permanent settlement at Sault Ste. Marie, where, in 1669, he was joined by Father Dablon. During the summer of 1671 Father Marquette built a log chapel at a point upon the south side of the straits, naming the church and the point after the founder of his order, St. Ignace. In 1669 he visited and named the Apostle Islands, and in an Indian village on the Madeline Islands, or as he called it, "La Pointe," he built a chapel. The visitor of today is shown the original chapel, quite enclosed by the newer and rather pretentious village church.

The first vessel to sail upon the lakes was a brigantine of ten tons commanded by La Salle, who cruised around Lake Erie, near Niagara River in December, 1678.

The shores of the lakes were the scenes of numerous battles between the French and English and their allies from among the several Indian tribes in 1756 to 1760 when Mackinac and other French forts were ceded to the English. Again in 1763 was Mackinac the scene of bloodshed when the Indians uprose and barbarously slew the English garrison of seventy-four men. There were lively times, too, about the lakes during the slight unpleasantness between the English and the "Rebels" in 1776.

Fort Mackinac was a much contested point. It was occupied in 1780 by the English and until 1795 when they were ejected by the Americans, who had then become recognized as a nation. But the point was again contested in 1712; and this time the English played trumps and retained the fort until 1815 when they gave it up, as well as the entire Michigan side of Sault Ste. Marie.

St. Mary's Falls proving an insurmountable barrier to vessels plying the lower lakes, we may as well view Lake Superior's early navigation by itself. The "Recovery" was one of the first schooners built for its trade in 1804; and was owned by the British Northwest Fur Company. The "Mink," belonging to the Hudson Bay company, also plied its waters, as well as two other craft, until after the war of 1812, when three were floated down the rapids to engage in the then prosperous lower lake trade. One solitary boat remained on Lake Superior until 1835, when, on the revival of the fur business, the American Fur Company launched the 115-ton schooner "Astor," and again the 20-ton "Madeleine" in 1837, and the "William Brewster," 76-ton, in 1830. From that date until 1855, when the St. Mary's canal was opened, shipping was not very brisk on Lake Superior. Eleven other vessels were built upon its shores and plied its waters during that interval, two steamers of about 280 tons and nine schooners of from forty to 186 tons.

Shipping on the lower lakes kept about pace with that on Lake Superior. Lake Erie, however, had the honor of carrying the first steamer built for the lake trade, "Walk-in-the-Water," in 1818.

In 1855 the United States completed one of its wisest public works, and opened the St. Mary's ship canal and locks, otherwise popularly known as the "Soo" canal. From that date until 1875 there were fifty-eight American and twelve Canadian steamers on the lakes. It is interesting and instructive to compare these figures with the United States government records of 1895.

There were over 100,000 entries and clearances of vessels at the various lake ports during this past season of navigation, representing over 40,000,000 tons, valued at over \$500,000,000. New York can show but a little over one-quarter, Liverpool one-third as many entries and clearances; and the entire seaboard of the United States gives us a total of entrances and clearances of vessels less than one-half that number.

One-eighth of the entire commerce of the United States passes through the "Soo" canal; which traffic aggregates nearly 3,000,000 tons greater than that passing through the Suez canal.

The importance of this canal can be gauged by comparison of the value in dollars of freight passing through it during two-thirds of a year, as against the value of the total commerce of the world for the whole year. The figures are many and perhaps tedious, but I find that over one-sixtieth of the world's commerce is carried through this canal.

Another point at which one appreciates the commercial importance of the lakes is at Detroit, where there passed during the season of '94, 52,700 vessels, carrying a total of 38,571,208 tons. The Chicago port, the same season, did a business of nearly 13,000,000 tons.

To handle this fleet of 5,000 vessels requires about 40,000 men, besides the office forces and agents of the various transportation companies, stevedores and their gangs, crews of life-saving stations, lighthouse service, and all "hands" directly connected with shipping in all its branches and ramifications upon the Great Lakes—an army of something over 350,000.

AN EXPERT'S REPORT OF THE CONDITION OF CHICAGO BRIDGES.

In a report concerning the condition of the Chicago city bridges the Joseph Dixon Crucible Co., of New Jersey, N. J., sends us the following:

"The State street bridge was painted apparently with red lead and afterwards with white lead; the paint was obviously of a poor quality, being quite brittle. Rust spots were found under the red lead, although the metal was usually cleaned.

"The Clark street bridge was painted with red lead in the shop, and with the city's standard iron oxide afterwards. The trusses showed considerable rust everywhere. The horizontal surfaces are much worse than the vertical surfaces. The paint is brittle, and does not adhere well.

"The Wells street bridge, painted in the same way, is in much the same condition—the paint brittle and easily scraped off.

"The Lake street bridge is much the same, having been painted with red lead in the shop and iron oxide afterwards.

"The Madison street bridge had been coated with red lead in the shop, and a later coat with a metallic paint. The paint is uniformly very brittle and easily removed. The metal painted is generally rusty."

Further on in the report it is stated that in no instance had the red lead paint been in service over seven years, and that the bridges painted with iron oxide were in better condition than those painted with red lead.

Much has been said and written lately concerning protective coverings for iron structural work. The growing tendency among those who have given the matter careful consideration, is to add some form of carbon to the red lead used, or to discard red lead altogether. This has caused the red lead manufacturers to issue pamphlets condemning the use of carbon—especially graphite. The statements of the red lead people have been so wide of the facts that the Joseph Dixon Crucible Co., Jersey City, N. J., have made reply by issuing a pamphlet showing the value of graphite, plumbago and black lead for all purposes.

NOTICE TO MARINERS.

REPORTED REMOVAL OF WRECK OF ADAMS.

The Michigan Wreckage and Salvage Co. have reported to the Canadian Government that they have entirely removed the wreck of the schooner "George W. Adams" which lay sunk in Lake Erie about 4 3-10 miles NW. by W. from Colchester Reef light, and that the site of the wreck has been swept by 26 foot rods without any obstruction being found. It is proposed to verify this report by a further examination, and unless the obstruction is found not to be removed, no further notice will be given.

SOUTH BASS ISLAND LIGHT STATION.

Notice is given by the Light-House Board of the United States of America that, on or about 10 July, 1897, a fixed red light of the fourth order will be established in the structure recently erected on the south-westerly point of South Bass Island, westerly part of Lake Erie.

The focal plane of the light will be 60½ feet above mean lake level and about 40 feet above the base of the tower. The light will be visible about 13 miles in clear weather. The light will illuminate 315 degrees of the horizon, the dark angle lying S. by W. ½ W. and SW. by W. ½ W., but in general the light will not be visible to the eastward of S. ½ E. nor the northward of WSW. ½ W. owing to trees on the island.

The light will be shown from a black lantern surmounting a square red brick tower projecting from the southwest corner of a square, two-story, red brick dwelling with slated roof.

The approximate geographical position of the tower is:

Lat. N. 41° 37' 47"
Long. W. 82° 50' 31"

Bearings and distances of prominent objects are: Starve Island Reef Buoy, SE. ½ E., 1½ miles; West Sister Island Lighthouse, NW. by W. ½ W., 14 miles; Green Island Lighthouse, NW. ½ W., 1½ miles.

In approaching from the eastward, keeping Green Island light open to the southward of this light will guide clear of the southerly extremity of Starve Island Reef.

F. GOURDEAU,

Deputy Minister of Marine and Fisheries.

Department of Marine and Fisheries.

Ottawa, Canada, June 30, 1897.

All bearings, unless otherwise noted, are magnetic and are given from seaward, miles are nautical miles, heights are above high water, and all depths are at mean low water.

Pilots, masters, or others interested are earnestly requested to send information of dangers, changes in aids to navigation, notices of new shoals or channels, errors in publications, or any other facts affecting the navigation of Canadian waters to the Chief Engineer, Department of Marine and Fisheries, Ottawa, Canada.

SQUAW POINT LIGHT STATION.

Treasury Department.

Office of the Light-House Board,
Washington, D. C., July 30, 1897.

Notice is hereby given that, on or about August 16, 1897, a light of the sixth order will be established in the structure recently erected on the westerly end of Squaw Point, E. side of Little Bay de Noquette, northerly end of Green Bay.

The light will show fixed white with a fixed red sector. Its focal plane will be 40 feet above mean lake level and 34 feet above the base of the tower. The light will be visible about 13 miles in clear weather; will illuminate 270 degrees of the horizon, showing red to the eastward of NNE. (bearing from a vessel), the red sector covering the shoal water lying to the southward of the point on the easterly side of the channel.

The light will be shown from a black lantern, surmounting an octagonal buff brick tower projecting from the southwesterly corner of a one and one-half story bluff brick dwelling, with red roof.

The approximate geographical position of the tower, as taken from Chart No. 27 (North End of Green Bay) of the United States Survey of the Northern and North-western Lakes, is:

Latitude, North 45° 49' (56"):
Longitude, West, 87° 00' (31").

Bearings and distances of prominent objects are:

Escanaba Light House, S. by W. ½ W., 6½ miles.

Saunders Point, N. by E. ¼ E., 1½ miles.

Bearings are true and given approximately; miles are statute miles.

LAKE MICHIGAN.

Wiggins Point Shoal Buoy, a red second-class nun, was established June 13, in 30 feet of water, to mark the easterly extremity of the shoal off Wiggins Point. Seul Choix Point Light House, ENE. ½ E.; tangent to Pointe aux Barques, SW. ¼ S.; Wiggins Point, W. by N., northerly; Thompson Point, NNW. ½ W. Just to the westward of the buoy the bottom becomes very irregular, varying from 42 to 16 feet.

By order of the Light-House Board.

W. S. SCHLEY,
Captain, U. S. N., Chairman.

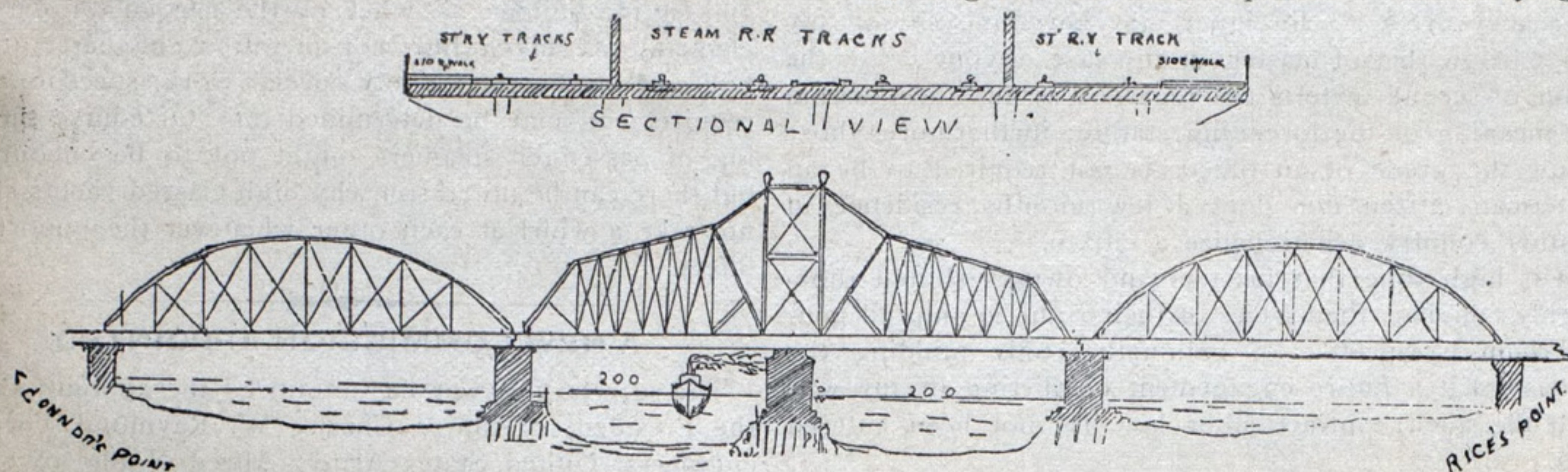
Admiral Colomb, R. N., presents in the North American Review for August a valuable contribution upon "The Progress of British Warships' Design." The Admiral is thoroughly conversant with his subject, and the article is well worth reading, since it shows the lines on which the vessels constituting the British fleet have been constructed.

THE DULUTH-SUPERIOR BRIDGE.

As will be seen by our illustration the Duluth-Superior bridge is now an accomplished fact, as announced in our columns some weeks ago. The statement that bridges are not an obstruction to navigation is amply contradicted by the following:

"During the past week or ten days a couple of boats struck the Duluth-Superior bridge. The Duluth News-Tribune says: It is believed there is a fair prospect that some interesting legal proceedings may grow out of the accidents occasioned by vessels colliding with the Duluth-Superior bridge. The Duluth representative of one of the vessels that occasioned damages to the extent of several hundreds of dollars to the structure received a letter

undertaking, which would require substantial uniformity in the width of the channel of the river by building spurs and dikes at points where the Mississippi is too wide, the proper riveting of the banks wherever caving is likely to occur, together with the building of permanent levees of a height and strength sufficient to confine the waters in the channel. It is stated that since 1865 the cost of repairs has amounted to considerably over forty million dollars, yet owing to the fact that this work is of a temporary character the benefits which would be derived from a permanent levee are lost, and every few years the floods necessitate fresh expenditures of vast sums of money. Hence this patchwork policy is short-sighted and in the long run the most expensive. The carrying out



THE NEW DULUTH-SUPERIOR BRIDGE RECENTLY OPENED.

from the owner of the boat to make a settlement with the bridge company on a fair basis, if on investigation the claim appeared to be all right. The vessel representative investigated, with the result that he said yesterday that he had concluded to advise the owner of the boat to contest the claim and to bring a counter-claim for damage to the boat.

The vesselowner alleges that the bridge under the present circumstances is not properly located with reference to the current and that the trend of the current should be changed in some manner. He says that the current does not run directly through the draw, and that unusual care has to be observed to handle a large vessel with safety when going through. The vesselowner says that if the middle ground between the Duluth-Superior bridge and the Northern Pacific bridge was dredged out and the trend of the current changed somewhat, accidents would be almost unheard of at the bridge. In two of the cases where accidents have happened to the bridge it is claimed that the vessels were coming down from the direction of the ore dock and that in one case a raft, and in another a dredge, were occupying the north side of the draw. The accidents, it is claimed, were occasioned by the vessels attempting to go over to the south side of the draw and through the bridge at that point. It is claimed that there is not water enough for a vessel to do this.

The bridge was, as everybody understands, located according to law, and Major Sears says that it is a mistake to say that the current does not run directly through the draw. He says that the location of the bridge was made with especial reference to the current. It is now estimated that the damage to the Duluth-Superior bridge by reason of the colliding of the steamer Robert Fulton will amount to about \$5,000. Investigation of the exterior damage shows that the amount will cover the damage to the structural iron work of the draw and the street car tracks as well as to the timber work of the pier underneath. It is also claimed that there are damages to the interior machinery in the drum or turn-table, and if so the cost will probably be increased."

A PERMANENT MISSISSIPPI LEVEE.

B. O. Flower, in the August Arena.

Returning to the question of the Mississippi River, let our national government build a permanent levee, which, like the great highways of ancient Rome, should be built to endure for generations.

"There are," says ex-Gov. Lionel Sheldon, "over twenty-three million acres exposed to overflow from the mouth of the Ohio to the Gulf of Mexico. The productive power of these lands is not excelled in any part of the world, and by proper cultivation they would annually add many hundreds of millions of dollars to the national wealth and afford profitable employment for several hundreds of thousands of people."

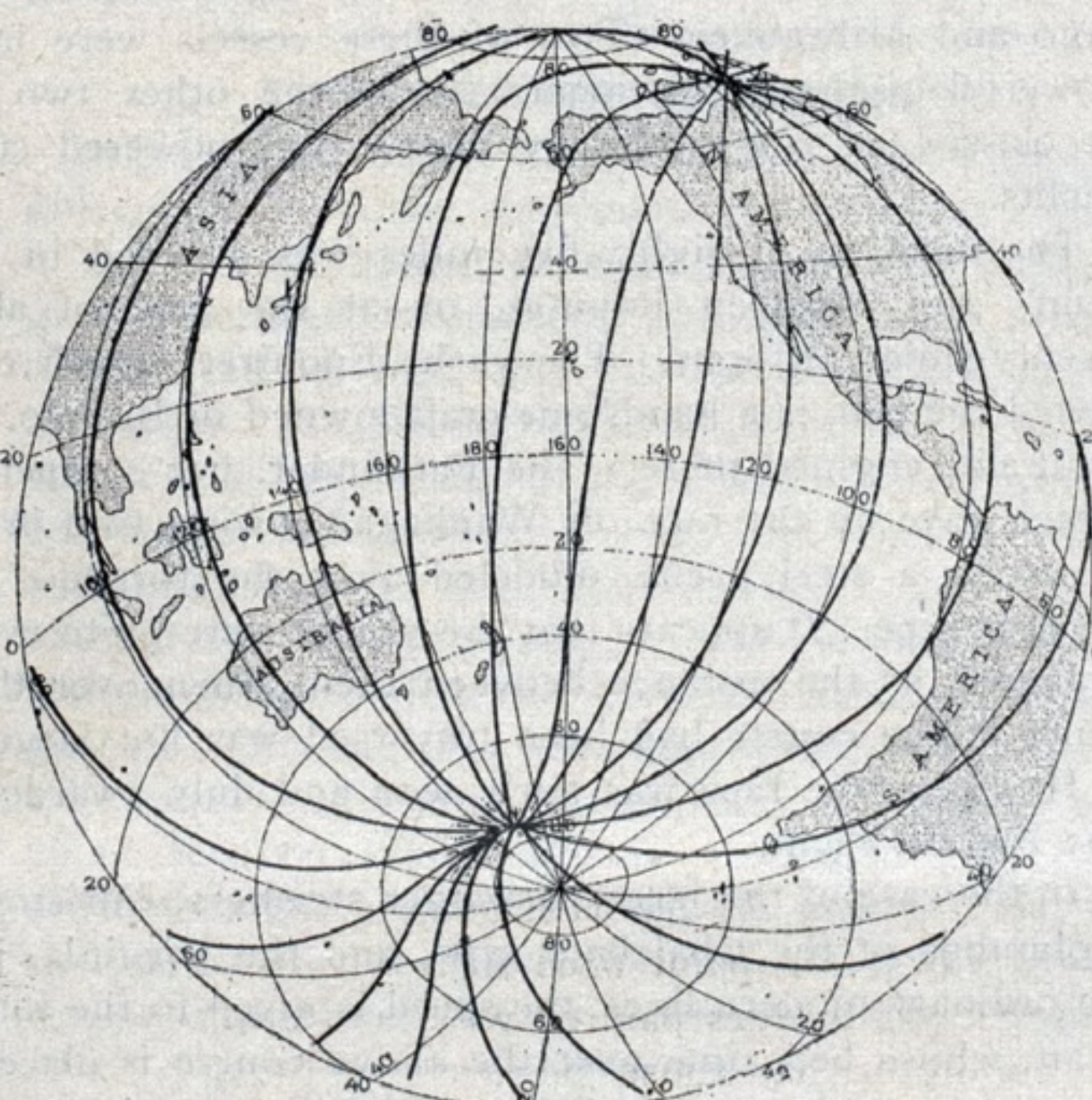
Eminent engineers who have examined the levees under the auspices of the Mississippi River commission, agree that the problem is one which can be successfully solved if a sufficient amount is appropriated for so gigantic an

undertaking, which would require substantial uniformity in the width of the channel of the river by building spurs and dikes at points where the Mississippi is too wide, the proper riveting of the banks wherever caving is likely to occur, together with the building of permanent levees of a height and strength sufficient to confine the waters in the channel. It is stated that since 1865 the cost of repairs has amounted to considerably over forty million dollars, yet owing to the fact that this work is of a temporary character the benefits which would be derived from a permanent levee are lost, and every few years the floods necessitate fresh expenditures of vast sums of money. Hence this patchwork policy is short-sighted and in the long run the most expensive. The carrying out

THE LATE CAPT. M'GRAW.

Capt. Hugh Earl McGraw, one of the oldest captains on the lakes, died this week from the effects of a stroke of paralysis, received last Friday.

Capt. McGraw was born in Glasgow, Scotland, came to the United States and at the age of 18 he received his papers at Erie, Pa. The first vessel commanded by him was the Ira H. Owen, which was also the first steamboat built by the Craigs at Gibraltar, Mich. He was in command of this boat for two years. During his career of 43 years he was in continuous service on one boat or another as master. He was for many years the right hand man of Eber Ward in his vessel interests, and later had charge of the barge interests of the Blanchard Navigation Co. The last vessel he commanded was the Justice Field, owned by that company. It was the captain's proud boast that in all his years as a navigator he had never lost a vessel or lost a man.



The two diagrams give a full view of the lines of actual direction of the compass needle when out of reach of all magnetic influences except the earth's. The magnetic lines relate to the year 1895.

The captain was over six feet tall and a man of splendid physique and great endurance. He was married in 1856 to Janet Williamson, of Ontario. He located his home, over 20 years ago, at 340 Twentieth street, Detroit, and has lived there continuously since. He leaves two sons, Thomas W. McGraw, manager of the transportation department of Swift & Co., of Chicago, and William H., general manager of the Gainesville, Tex., electric light and power company. He took very little interests in politics, although a lifelong Republican. He was associated with Senator Chandler in several enterprises.

REPORT OF THE UNITED STATES LIFE-SAVING SERVICE, 1896.

At the close of the fiscal year the life-saving establishment embraced two hundred and fifty-six stations. Of this number, one hundred and eighty-six were situated on the Atlantic and Gulf coasts, fifty-five on the coasts of the Great Lakes, fourteen on the Pacific Coast, and one at the Falls of the Ohio, Louisville, Ky.

The number located in each of the several districts was as follows:

First District (coasts of Maine and New Hampshire..	12
Second District (coast of Massachusetts).....	25
Third District (coasts of Rhode Island and Long Island)	39
Fourth District (coast of New Jersey).....	42
Fifth District (coast from Cape Henlopen to Cape Charles)	17
Sixth District (coast from Cape Henry to Cape Fear River)	31
Seventh District (coasts of South Carolina, Georgia, and Eastern Florida)	12
Eighth District (Gulf Coast)	8
Ninth District (Lakes Erie and Ontario, including Louisville Station)	12
Tenth District (Lakes Huron and Superior).....	16
Eleventh District (Lake Michigan).....	28
Twelfth District (Pacific Coast).....	14

Total256

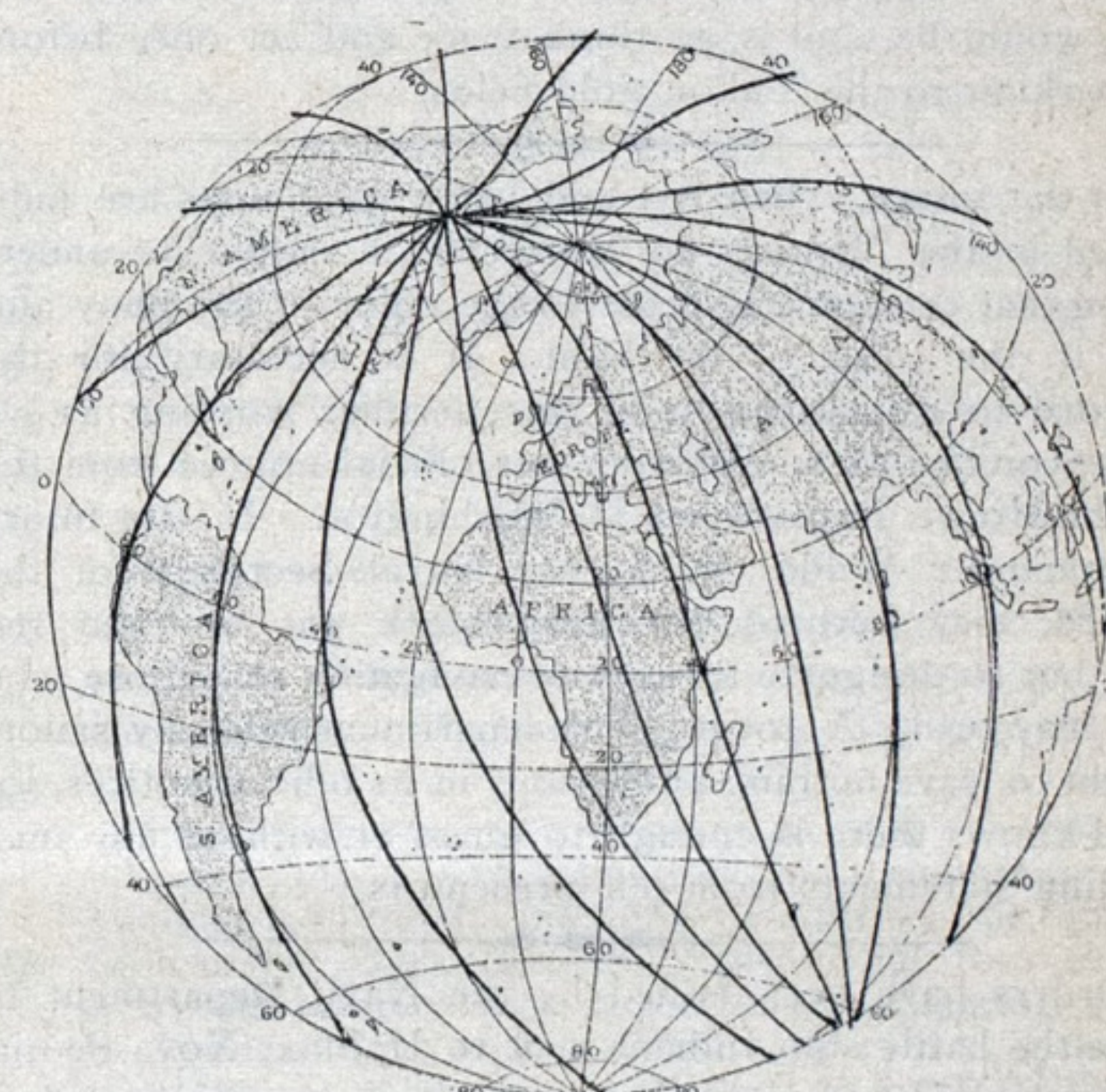
The number of disasters to documented vessels within the field of station operations during the year was four hundred and thirty-seven. There were on board these vessels four thousand six hundred and eight persons, of whom thirteen were lost. The estimated value of the vessels was \$8,880,140, and that of their cargoes \$3,846,380, making the total value of property involved \$12,726,520. Of this amount, \$11,293,770 was saved to the owners and \$1,432,750 lost. The number of vessels totally lost was sixty-seven.

The number of shipwrecked persons who received succor at the stations was six hundred and thirteen, to whom one thousand four hundred and thirty-six days' relief in the aggregate was afforded.

In addition to the foregoing there occurred during the year two hundred and forty-three casualties to small craft, such as sailboats, row-boats, etc., on which there were five hundred and ninety-seven persons, seven of whom were lost. The property involved in these instances is estimated at \$119,265, of which \$114,915 was saved and \$4,350 lost.

MAGNETIC AND TRUE NORTH.

As a means of showing the actual position which a magnetic needle will indicate on the earth's surface we produce the following diagrams:



In the diagram, the points toward which the heavy lines converge in the northern and southern hemispheres are the magnetic poles. The shaded areas represent the outlines of the land masses of the earth, and the lighter lines the geographic meridians of longitude and parallels of latitude.

The direction of the heavy lines with reference to the geographic meridians exhibit the actual directions assumed by the compass needle in all parts of the world, and they show at once why, although there is only one magnetic should have different values in different localities.



ESTABLISHED 1878.

Published Every Thursday by

THE MARINE RECORD PUBLISHING CO.,

Incorporated.

GEO. L. SMITH, President.

C. E. RUSKIN,	-	-	-	Manager.
CAPT. JOHN SWAINSON,	-	-	-	Editor.
THOS. WILLIAMS, Chicago,	-	-	-	Associate.
CLEVELAND,			CHICAGO.	
Western Reserve Building.			Royal Insurance Building.	

SUBSCRIPTION.

One Copy, one year, postage paid,	-	-	\$2.00
One Copy, one year, to foreign countries,	-	-	\$3.00
Invariably in advance.			

ADVERTISING.

Rates given on application.

All communications should be addressed to the Cleveland office.

THE MARINE RECORD PUBLISHING CO.,

Western Reserve Building, Cleveland, O.

Entered at Cleveland Postoffice as second-class mail matter.

CLEVELAND, O., AUGUST 5, 1897.

The general superintendent of the Life Saving Service asks for bids on the construction of a new station at Lake View Beach, near Port Huron. There seems to be some question about the best location for this branch of the Life Saving Service and the site apparently now determined on will be watched with some degree of interest by vesselmen to learn if it is the best that could have been selected, taking all local conditions into consideration.

The western world seems to be going mad just now regarding the gold finds in the Yukon River and district. Certainly there is gold up there, and lots of it, but the ordinary citizen might as well go and look for the North Pole as to go after gold up in that region during the winter months. There ought to be something picked up in summer, as there would at any legitimate trade or business, and perhaps a trifle more than what is ordinarily paid for common labor, yet outside of this, people should be more than careful in embarking on a "will o' the wisp" expedition already crowded with prospectors. Our advice would be, and is, to think twice and act once before embarking to the Yukon gold fields.

In the future, when red and black gas buoys are published in the "Notices to Mariners" it should be understood that reference is made to the color of the buoy and not to the color of the light. It is necessary for the Record to call attention to this peculiar wording as we endeavor to follow verbatim, our official notices from the Light-House Department at Washington. In the future Commander Wilde, U. S. N., Naval Secretary of the Board, may perhaps not burn black gas or even red gas, but so designate the aids to navigation that those who run may read. A government department ruled by sailors ought to leave nothing ambiguous in its official notices, for God knows there is enough to guess at without any misleading statements from our preceptors.

Orders have been issued by the Navy Department to have the battle ship Indiana sent to Halifax, Nova Scotia, to be docked and cleaned, because it was considered dangerous to try to dock her at Port Royal, S. C. Actions of this sort attract more attention from foreigners than from Americans. It looks odd to see a country that aspires to a leading place among the naval powers of the world without proper docking facilities for the vessels it has. The New York dry dock is big enough to accommodate the Indiana, but it is out of order, if indeed, it can fairly be said to have ever been in order, although it is comparatively new. It is simply ridiculous for this country to go on building a new navy when we are compelled to seek the courtesies of other nations in the up keep of those naval vessels we now have.

SHIPPING ALIEN SEAMEN.

The immigration officers at lake ports have been somewhat exceeding their duties in the past by interfering with sailors, Canadian, Norwegian, Dutch, Greek or any other nationality desirous of shipping in an American-owned vessel. We have frequently pointed out that while the shipping, discharging and service of seamen is eminently surrounded with laws governing such conduct, no one has the authority to prevent them seeking employment or going to work on any American vessel providing no engagement or contract made previous to their migration existed.

The law requires all officers of vessels of the United States to be citizens, yet, if on a foreign voyage, where a vacancy occurs, a foreigner may be employed for any grade below that of master, in any case, anyone below the grade of second mate is not regarded as an officer within the meaning of the foregoing statute; furthermore, those below the grade of an officer is not required to be an American citizen nor does a few months residence in another country denationalize a citizen.

It is high time that masters and owners should thoroughly convince themselves of their right to ship all general help irrespective of nationality, only minding the proviso that a future engagement conflicting in any way with the alien contract labor law has not been entered into.

It is of course very right and proper that, other things being equal, citizens should at all times be given the preference to work on board of United States vessels, but until other maritime powers discriminate against American seamen, it is hardly equitable for this country to play the "dog in the manger" act, nor, except in the minds of one or two over-zealous officers does such a sentiment exist.

We could point out at least two ports on the lakes where the immigration officer has shown himself more than obnoxious to masters fully acquainted with their duties in regard to the shipping and discharging of seamen, and, should such conduct be continued to their annoyance we would almost recommend the idea of calling a couple of lusty fellows along and depositing the offending and officious immigration officers where they would have a better right to be than on a ship's deck. If the present laws are wrong then eradicate and make new ones, but for interlopers to come sing-songing around a master regarding the nationality of his deck-hands or firemen, he should meet his just deserts and be made to make "a hole in the drink."

RACING ON LAKE MICHIGAN.

A quartet of fast steamers raced last week between Chicago and Milwaukee. Two of these vessels were large, powerful passenger steamers, while the other two can be classed as fancy tonnage, being high-powered steam yachts.

The distance of eighty-five miles was covered in four hours and eighteen minutes, or at the rate of about twenty miles an hour. The yacht Enquirer, which completed the run, is a handsome craft, owned in Buffalo, and built and engined there. The Pathfinder, her competitor, which gave up the race off Waukegan, owing to a breakdown, is a steel yacht, modeled after the torpedo boat style or type. It appears that the yachts were quite evenly matched, as the distance between them when over thirty miles of the course had been traversed was not large.

However, the race was fairly won and duly awarded to the Buffalo yacht.

In the case of the large passenger steamers, Christopher Columbus of the whaleback type, and the Virginia, built on ordinary modern lines, the speed is given to the former craft, whose best time over the above course is placed at four hours and four minutes, or actually ten minutes better time than she made on her racing run of last week. At the same time there is again but little difference between her speed and that of the Virginia, as we noted relative to the two yachts.

It has been said that it is of interest to compare the speed made during the recent tests with that of some of the flyers recently built on salt water. Take, for instance, that of the Turbinia, the little yacht with a new type of engine. She is credited with a record of forty miles an hour. Instead of requiring four hours and eighteen minutes to make the run of eighty-five miles, this little craft would have covered the distance in two hours and seven

and one-half minutes. The new torpedo boat Porter, of the United States navy, has a record of thirty-four miles an hour. She could cover the eighty-five miles between Chicago and Milwaukee in two and one-half hours. The Norwood, a fast New York launch, has a record of thirty miles an hour. This would make her time between Chicago and Milwaukee two hours and fifty minutes. So that, after all, there is still plenty of chance to improve on the speed tests made on Lake Michigan, although the quartet represented the highest skill in construction and the speediest craft ever put afloat on the lakes. Each, too, was of a different model and as a matter of course engined differently.

These tests are of the highest importance to the ship and engine builder, as, when all the particulars, data and elements are taken into consideration the best form of hull and machinery for any special work, speed or other requirement, may be determined on. Of course the racing of passenger steamers ought not to be encouraged, but there can be no reason why high classed yachts should not take a whirl at each other whenever the opportunity offers.

A NEW COMMISSION APPOINTED.

The secretary of war has announced the appointment by the President of Major Charles W. Raymond, corps of engineers, United States Army; Alfred Noble, of Chicago, and George Y. Wisner, of Detroit, as a board of engineers to make surveys and examinations for a deep water way from the Great Lakes to the Atlantic tide-waters.

This board was authorized in the last sundry civil act, approved June 4, 1897, and is expected to complete the work undertaken by the deep waterways commission appointed by President Cleveland. That commission, of which Dr. James B. Angell, of Ann Arbor, Mich., now minister to Turkey, was the chairman, made an exhaustive examination into the practicability of connecting the Great Lakes and the Hudson River by a deep water channel, but failed to recommend a definite route.

The commission recommended in a general way several different routes and submitted a quantity of data regarding the commerce that would probably pass through canals built by the several routes. It made no final surveys or estimates of the cost of such a canal, but recommended that a board of engineers be appointed for that purpose.

The new board will probably be immediately organized, and will undertake the work with a view to reporting to Congress at the next session.

Though the Angell commission strongly recommended the feasibility of a ship canal between the Great Lakes and the Hudson River, the War Department engineer, who, at the direction of Congress, made a similar but separate investigation, suggested that such a canal was not worthy of being undertaken by the Government.

It is estimated a ship canal between the Hudson River and the lakes would cost not less than \$2,000,000 a year. The War Department engineers who have investigated this subject, are of the opinion that it would be better to enlarge the Erie Canal and canalize the Mohawk River, thus making a water way for barges, than to attempt to build a canal that would pass ocean-going vessels. A large canal would cost only about \$50,000,000 and would furnish a benefit to commerce commensurate with its cost.

Major Raymond, the chairman of the commission, is one of the most eminent and capable engineers in the army. He is now stationed at Philadelphia. He was born in Connecticut and graduated from the West Point military academy in 1865. He became captain of engineers in 1867 and reached his present rank in 1883.

USING DYNAMITE UNDER WATER.

Owing to the great pressure of water, which is about 70 pounds to the square inch, around the steamer Pewabic, sunk in Lake Huron, the crew of the salvage steamer Root have met with little success in blowing up the wreck with dynamite. Larger charges will be used, with the hope of opening up the steamer's hull so that the copper can be obtained. The Root brought little copper ashore, considering the time and labor which has been expended in the salvage operations. On the other hand, the weather has been too rough for steady and successful work, nor is it likely to improve very much from this time on to the close of navigation.

THE ELKINS BILL.

Whether it is the best means of upbuilding our merchant marine or otherwise, Senator Elkins is certainly energetic in his efforts to carry through his discriminating bill on carrying cargoes. He wants our imports and exports to be carried exclusively in American bottoms, irrespective of what other maritime nations may think of the measure and irregardless of any action they may take in the future to meet such apparently arbitrary measures.

Senator Elkins said in a speech in the Senate just before the close of Congress a few days ago that we must cripple the English carrying trade in so far as American, or more strictly speaking, United States commerce was concerned, and in summing up, said:

"First comes England's enormous tonnage, which far exceeds that of all other nations together. This is supported by the British Lloyd system of surveys and classifications, discriminating in favor of British built vessels. That system, in turn, leads to discriminations by the insurance underwriters, favoring English ships. Then come mail subsidies, amounting to about \$4,000,000 a year, on which Great Britain is willing to suffer a seeming loss of about \$2,500,000 annually; while subsidies to steamships as auxiliary cruisers add about \$250,000 a year. Again, she mans her ships more cheaply than we man ours, employing fewer men to the ship and giving lower wages. Her ships are surer of cargoes, having markets everywhere. While the tax rate and insurance are low, the income from ship ownership is high compared with the current rates of interest on money. The ship's supplies are taken from goods in bond, or duty free. In repairs, the ships have an unequalled dock equipment, with low rents for the docks and a low cost of labor.

"Other advantages which Great Britain holds are those of national pride and interest in marine affairs, giving the government a free hand in shipping matters; the possession of the beaten track of commerce and an enormous foreign trade covering the world; a banking system greatly accommodating the debtor nations, and tremendous in the capital and surplus of its banking houses; an excellent consular system, a national board of trade which has full executive power; a very extensive system of submarine and other wires; a system of great colonies all over the world, creating and supplying markets; finally, a powerful navy for the protection of the merchant marine, if needed. The wage earning power of the British merchant marine is put at \$75,000,000 annually, and the freight and passenger earning power at \$500,000,000, while all this gives remunerative employment for supplying coal, iron and steel, and profits in building and repairing ships.

"These points are not enumerated by way of discouragement, but merely as a maritime supremacy. They are hard facts, and it is with a reliance on existing facts that the London Times recently declared in reviewing the discussions of the proposed revival of American shipping, that the union jack is not likely to have anything to fear from the stars and stripes for a long time to come. But the true lesson is that, with Great Britain thus strongly entrenched in the world's carrying trade, no ordinary measures will restore to us a fair share of it."

DEATH OF AN ENGINEER OFFICER.

Col. James F. Gregory of the United States Engineer Corps, who was found dead in his bed at his residence in Cincinnati on Saturday morning, had a large circle of friends on the lakes and especially at Lake Michigan ports, as he had been stationed in Milwaukee for three years. He was a highly-accomplished and very affable gentleman, who won the esteem of all whom he met. His death was very sudden and unexpected. On Friday he spent the day at his office, apparently in his usual health. Saturday morning he was discovered in his bed, dead. Heart disease was the cause of his death.

Col. Gregory was born in Tompkins County, N. Y., in 1845, and was appointed a cadet at the United States Military Academy, West Point, N. Y., July 1, 1861. He was graduated with honors June 23, 1865, and promoted to second lieutenant, Fifth Artillery. On May 1, 1866, he was promoted to first lieutenant, Fifth Artillery, and on June 2, 1866, was transferred to the engineer corps of the army, with the same rank. He was promoted to captain June 13, 1874, while on the boundary survey along the forty-ninth parallel. In 1876 he was detailed on the survey of the Union and Central Pacific railways. He served as chief engineer of the department of Texas from December 11, 1876, to June 12, 1878, and on June 24, same year,

was detailed to the command of the engineer company at Willet's Point, N. Y., serving in this position until December 25, 1878. On December 28, same year, was appointed chief engineer of the division of the Missouri, serving in this capacity till October 23, 1883. On July 15, 1884 he was appointed aide-de-camp to Lieut. Gen. Philip H. Sheridan, with the rank of lieutenant-colonel of staff. In October, 1885, he was transferred to temporary duty in the office of the chief of engineers, United States Army, at Washington, D. C. Col. Gregory was on light-house duty February 18, 1886, to July 15, 1887, as engineer of Fifth and Sixth Light-House districts. On July 16, 1887, he was appointed engineer's secretary of the Light-House Board at Washington, D. C. On January 20, 1892, he was sent to Milwaukee in charge of the rivers and harbors on the west shore of Lake Michigan. He then went to Cincinnati, and on October 1, 1895, assumed charge of the river improvement service. He was appointed major, corps of engineers, October 12, 1896. He was a man of literary ability and the author of an Indian sign language and also author of the telegraphic code of the army. He married a daughter of Rev. Minnigerode, minister in charge of the Episcopal Church, during the Civil War, at Richmond, Va. He leaves a stepson, Charles Maigne, who is at Lane Seminary, Cincinnati, for the summer.

DOCK AND HARBOR WORK.

Breyman Bros, of Toledo, who have in hand a big contract for dredging Boston Harbor, have bought two large tugs to be used in connection with dredges and scows which they are having built for the work. The tugs were bought from New York parties and are each ninety feet long. One tug is 14 years old, and the other 10 years old. Both have steeple compound engines, one of which is 19 to 38 inches with 26 inches stroke, and the other 19 by 36 inches, with inches stroke.

AN OFFICIAL TOUR.

General Wilson, Chief of Engineers, Corps of Engineers, U. S. Army, has just completed a tour of inspection of the Government engineering works in and near the Great Lakes. He traveled about 3,000 miles, during which time he visited Chicago, St. Paul, and Duluth, and made a personal inspection of the condition of the Chicago Canal, the Hennepin Canal, St. Mary's River, the Soo Canal, and the entire system of transportation between the lakes, together with all the river and harbor works along the line. He was greatly impressed with the magnitude of the commerce depending upon them. General Wilson was especially impressed with the magnificent natural harbors at Duluth-Superior and it is certain that his recent tour of the lakes will redound to the advancement of river and harbor work.

THE DEEP WATER CHANNEL.

In his annual report Col. G. J. Lydecker, Corps of Engineers, U. S. Army, announces the practical completion of the 20-foot channel between Duluth and Buffalo. He gives a detailed statement of this great work, which was commenced in 1892, and has been steadily prosecuted ever since. The last section of improvement to be finished was that at the mouth of the Detroit River, where only one dredge was operated recently, but the job, while slow and unsatisfactory, had about reached completion at the close of the fiscal year, July 1. The estimated cost of the 20-foot channel, when the work was commenced, was \$3,340,900. This sum has been appropriated and, after present contracts have been settled, there will remain on hand about \$950,000, which will be needed to give the final touches to the project as originally planned, and leave a clear 20 to 21-foot channel through all of the connecting waters on the lakes directly recommended by Congress.

ENGINEER'S REPORT.

Lieut. Col. Lydecker, Corps of Engineers, U. S. Army, in his comprehensive report of the rivers and harbors, declares that the 20-foot channel is anything but a fact as yet. "It is proper to state," he says, "that the completion of the 20-foot channel in such a way as to give a safe line of water travel from the heads of Lakes Superior and Michigan to Buffalo will require more than was specified in that project; this is especially the case respecting some portions of the Detroit, St. Clair and St. Mary's Rivers. But the funds now available will suffice for completing work authorized by the general project, and therefore no estimate for additional work is submitted in this report."

A rather startling report is made on the harbor of refuge at Sand Beach by Col. Lydecker. He says the timber super-structure is in an advanced stage of decay, and the main breakwater so weakened as to make it liable to be carried away by any severe storm. He thinks it should be rebuilt of masonry.

ON ALASKAN WATERS.

The record which Chicago has made on the Amazon River of Brazil in fitting out sixteen of its most successful small and medium sized steam vessels, bids fair to be excelled in number by contracts from the Yukon of Alaska and its tributaries, though as yet the latter demand is for rather smaller sizes.

That Chicago should be shipping marine machinery simultaneously to the Amazon and the Yukon Rivers, is good proof of its value as a distributing point, while the fact of the buyers being practical boat builders and marine engineers of experience, emphasizes it.

The difficulty which the distant buyer (he may even be a good engineer), encounters in choosing an "outfit" of marine machinery exactly right for his particular purpose, and hull, is in assembling the various accessories of correct design and proportion to each other and the service expected; it requires the most careful attention from those thoroughly experienced in building and operating steam vessels, to know just what to include, and to have the facilities for making it. This enters into the seemingly minor details of equipment and fittings, but doubly important in the proportions of the several parts to the engine, boiler, pumps and bearings. All must be of that character and completeness which "goes together" can be operated without risk at points distant from repair shops, and the common "manufactured" stationary engine turned into so-called marine machinery (so often the cause of disastrous failure to an otherwise promising enterprise), cannot enter into this calculation where imperfection or omission is likely to prove serious.

BUFFALO COAL TRADE.

The following statistics of the coal trade of Buffalo were compiled by Mr. William Thurstone, secretary of the Merchants' Exchange:

Receipts of coal by railroad for June not reported, by request. Lake receipts for June, none. Shipments by lake for the month of June, 231,393 net tons, as compared with 348,849 tons in 1896, and 270,381 tons in 1895; for the season to July 1st, 430,243 net tons, as compared with 644,183 tons in 1896, and 530,169 tons in 1895. Receipts by canal for the month of June none, as compared with 3,924 net tons in 1896, and 340 tons in 1895; for the season to July 1st, none, as compared with 7,510 tons in 1896, and 340 tons in 1895. The shipments by canal for month of June, none, as compared with 240 net tons in 1896 and 1,352 tons in 1895; for the season to July 1st, none, as compared with 240 tons in 1896, and 2,248 tons in 1895. The shipments by lake westward so far this season show a decrease of 213,940 net tons, as compared with 1896, and a decrease of 99,926 tons, as compared with 1895.

Lake freights from June 1st to 30th this year were 20c to Chicago, Milwaukee, Duluth and Lake Superior ports; 25c to Green Bay, Sheboygan, Racine and Bay City; 20c to Toledo, and 35c to Saginaw. A year since the rates for June were 60@40c to Chicago, 55@35c to Milwaukee, 30@25c to Duluth and Lake Superior ports, 45c to Green Bay, 60@40c to Racine, 30@25c to Bay City, and 25c to Toledo.

The distribution of coal thus far this year was to the following places: One hundred and ninety-thousand four hundred and thirty-one tons to Chicago, 92,150 tons to Milwaukee, 61,050 tons to Duluth, 8,725 tons to Racine, 2,000 tons to Green Bay, 57,400 tons to Superior, 4,480 tons to Saginaw, 6,710 tons to Toledo, 900 tons to Lake Linden, 2,400 tons to Marquette, 1,238 tons to Fort William, 1,400 tons to Sault Ste. Marie, 1,100 tons to Manitowoc, 5,075 tons to Kenosha, 500 tons to Bay City, 3,100 tons to Hancock, 75 tons to Alpena, and about 10,000 tons to miscellaneous ports by vessels first clearing from Tonawanda.

The Fiction number of Scribner's Magazine has had a record for a decade. It has made the reputations of many new writers and increased the esteem in which the old ones are held. This issue sustains the well-earned reputation. It contains six complete short stories by Rudyard Kipling, Kenneth Grahame, Frank R. Stockton, Blanche Willis Howard, Molly Elliot Seawell, and Jesse Lynch Williams, and it appeals to many kinds of taste, a story of childhood, a farcical tale, a pathetic story, a fighting story, and a new journalism story.

H. C. BURRELL,

Marine Reporter.

We can Supply Men and Officers to Passing Vessels

BOAT ON THE RIVER
AT ALL HOURS,
NIGHT OR DAY.

ON THE SQUARE.

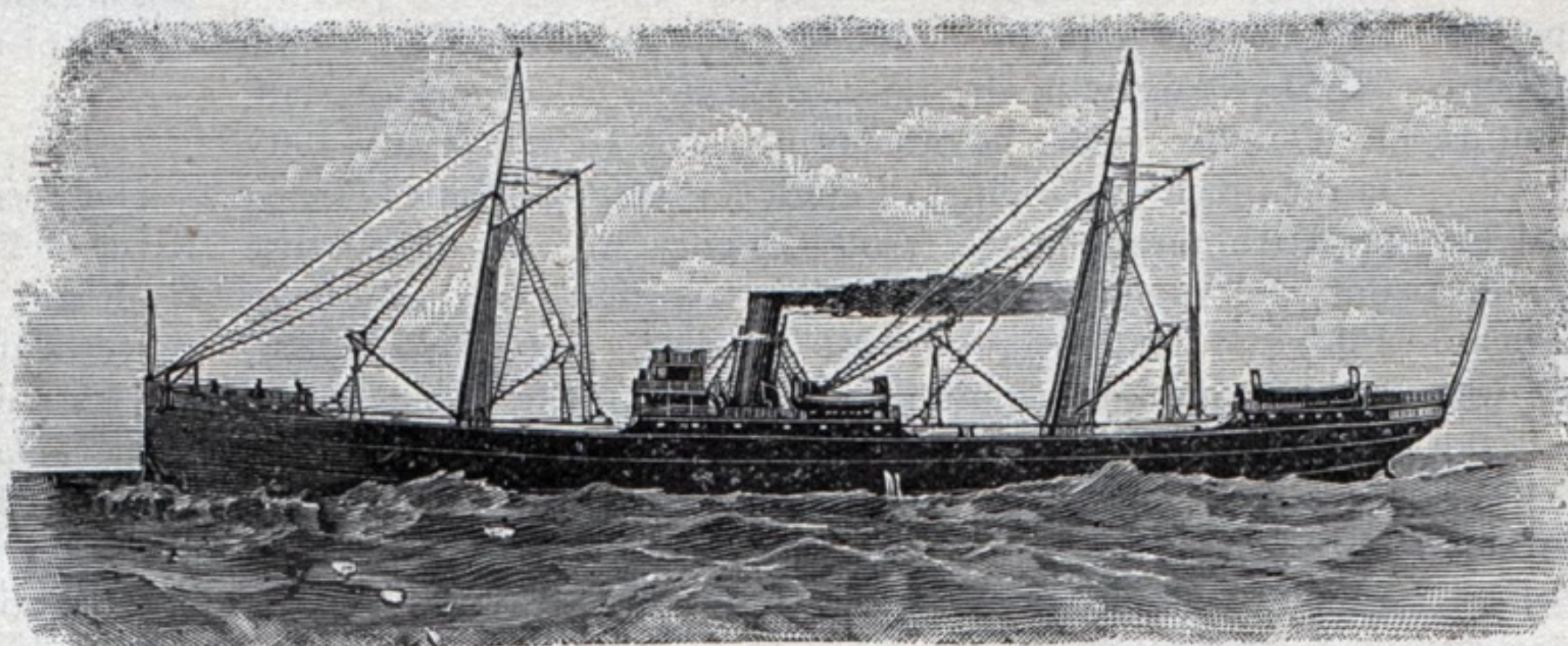
OFFICE:

FOOT WOODWARD AVENUE,
DETROIT, MICH.Signal: One long
two short.Our boats are
white. We'll treat
you white and deal
with you**F. W. WHEELER & COMPANY,**

BUILDERS OF ALL KINDS OF

**Iron, Steel, and
Wooden Ships**

FOR LAKE OR OCEAN SERVICE.

West Bay City, Mich.F. W. WHEELER, Pres.
J. S. PORTER, Treas.H. T. WICKES, V. P.
G. W. STIVER, Sec'y.**FRONTIER****Iron Works.**

MARINE ENGINES.

DETROIT, MICH.

William Wilford's**MATCHLESS
WATER-PROOF
CANVAS.**The best in the market for hatch
covers, is stronger, lighter, and more
durable than any water-proof goods
yet produced. It is made of a twisted
thread of pure flax, which renders it
very strong. It will not crack like
cotton goods, which is a great advan-
tage.**EDWARD A. BUNKER,**
Room 617, 27 AND 29 WILLIAM ST., NEW YORK.16-24 Woodward Ave.,
DETROIT, MICH.**THE PEERLESS****Spiral Piston and Valve Rod Packing.**Once Tried, Always Used.
Will hold 400 lbs. Steam.

Patented and Manufactured Exclusively by

PEERLESS RUBBER MFG. CO., 16 Warren St., New York.

193-195 Bank St.,
CLEVELAND, O.202-210 S. Water St.
CHICAGO, ILL.**CORRESPONDENCE.**We do not hold ourselves responsible in any way for the views or
opinions expressed by our correspondents. It is our desire that all
sides of any question affecting the interests or welfare of the lake mar-
ine should be fairly represented in THE MARINE RECORD.**THAT PORT HURON LIFE-SAVING STATION.**

Editor Marine Record.

Detroit, Mich., Aug. 3, 1897.

It still appears to me that the location of the intended
life-saving station at Port Huron is misplaced, as they
now intend to get six miles away from Fort Gratiot, al-
though a petition was signed by five hundred people to
have it established at the Light-House reserve.The steamer Cambria went ashore last week one mile
from Fort Gratiot light and if the station had been lo-
cated six miles away it would have taken a much longer
time to reach the wreck, also the most wrecks occur
nearer the light than six miles away, besides they can't
launch a boat from where the station is intended to be
put at the present time.There is not a sailor man on the lakes that would say
the present intended position is a good one for the new
station, and six miles up the lakes is no place for it in
my estimation.It would appear as if the railroad company park pro-
moters, real estate dealers and persons of that ilk has
had more to do with the location and changing of lo-
cations of the site than any marine interests. The su-
perintendent of the district as well as the chief of the ser-
vice should look fully into this question and determine
the best location which I think is at the Light-House
reserve.

NAUTICUS.

THE HEAVENS IN AUGUST.The following astronomical data for August is furnished
by the Washburn observatory at Madison, Wis.: Mercury
is an evening star and reaches greatest elongation east
Aug. 26. It will set then very near the west point of thehorizon. Mars and Jupiter are still close together, but
set very soon after the sun. Venus is the bright morning
star, but the planet is approaching the sun and diminish-
ing in brilliancy. Saturn is low in the southwestern sky
and farther west than the bright, red star, Antares.The times of the moon's phases are: First quarter,
Aug. 5, 12:24 p. m.; full moon, Aug. 12, 8:23 a. m.; new
moon, Aug. 27, 9:29 p. m.The principal fixed stars visible during the month are:
To the west, Orcturus Antares; in the evening, Mars.
Near the meridian, Vega. To the east, Altair.**VISIBLE SUPPLY OF GRAIN**As compiled for The Marine Record, by George F. Stone,
Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Albany.....		15,000	25,000		
Baltimore.....	1,508,000	824,000	100,000	18,000	
Boston.....	111,000	1,016,000	104,000		
Buffalo.....	788,000	470,000	1,152,000	103,000	191,000
a float.....					
Chicago.....	3,778,000	6,596,000	1,474,000	162,000	10,000
a float.....					
Cincinnati.....		2,000	10,000		2,000
Detroit.....	53,000	15,000	6,000	16,000	13,000
a float.....					
Duluth and Superior.....	1,197,000	23,000	273,000	386,000	260,000
a float.....					
Indianapolis.....	155,000	50,000	3,000		
Kansas City.....	105,000	184,000	116,000	6,000	
Milwaukee.....	110,000	3,000	1,000	41,000	75,000
a float.....					
Minneapolis.....	6,962,000	50,000	140,000	9,000	1,000
Montreal.....	249,000	76,000	566,000	35,000	40,000
New York.....	609,000	1,140,000	1,437,000	506,000	74,000
a float.....	7,000	00,000		75,000	20,000
Oswego.....		70,000	36,000		45,000
Peoria.....		19,000	21,000		
Philadelphia.....	184,000	886,000	100,000		
St. Louis.....	223,000	64,000	8,000	3,000	
a float.....	52,000			24,000	
Toledo.....	698,000	359,000	25,000	103,000	
a float.....					
Toronto.....	73,000		33,000		6,000
On Canal.....	42,000	293,000	81,000	193,000	68,000
On Lakes.....	910,000	3,460,000	812,000	84,000	20,000
On Mississippi.....		3,000	5,000		
Grand Total.....	17,814,000	15,677,000	6,528,000	1,769,000	825,000
Corresponding Date, 1896.....	46,754,000	10,752,000	7,166,000	1,598,000	718,000

EASTERN FREIGHT REPORT.Messrs. Funch, Edye & Co., steamship agents and ship
brokers, New York, furnishes the Marine Record with
the following synopsis of the freights out of New York,
Philadelphia, Baltimore and other neighboring ports, as
follows:

"Chartering for grain, as is apparent from the very
heavy list of fixtures, has been unusually active, mainly
for August-September loading, but the advanced rates
ruling in the preceding week have caused a great deal
of tonnage to be offered on the market, under the pres-
sure of which, although the absorption continued with but
a slight check, freights have somewhat receded, and are
quotable today on order cargoes for August-September
tonnage at 3s 4 1-2d, for later months 3s 6d@3s 7 1-2d.
This, apart some fixtures reported at 3s 9d for Septem-
ber loading, with privilege of Bayonne at 4s 1 1-2d (and
doubtless intended for that port), marks the top rate
hitherto reached from the Atlantic range of ports. The
activity in our market appears mainly due to continued
demand from France, to the execution of which an in-
crease in cost of the cereal and the freight simultane-
ously appears to present no abstacle. Berth freights have
latterly advanced on a level approximately equal to Cork
f. o. b. freights, and a number of large boats have found
takers at from 2s 10 1-2d@3s for full grain cargoes to
direct Continental ports. Amongst them is probably the
largest boat ever taken for full cargo of grain, the
"Knight Batchelor," of nearly 40,000 quarters for Ant-
werp. Apparently the demand for this class of boat is
supplied for the next few weeks, and, under continued
offering of this tonnage, it appears likely that owners
will have to make concession of part general cargo in
further fixture for August-September loading. The first
cotton charters from Atlantic ports have latterly been ef-
fected for September loading, and 35s appears more likely
to lead to further business from South Atlantic ports.
Some fixtures for deals from the Provinces are still re-
ported at slightly advancing rates, and the demand from

Southern ports for timber, although not pressing, has not been met in consequence of the freights offered for grain and other cargo from Galveston and New Orleans. The position may be summed up as one of fairly active demand from every quarter, but without any short interest uncovered, as charterers, warned by last year's flurry, appears to have provided tonnage quite sufficient to cover the ordinary demand for the next four or six weeks to come.

Our market for sailing vessels has shown a little more activity during the past week, particularly as regards petroleum to Europe and to the far East, for which full previous rates have been paid. Spot tonnage is getting very scarce, and, with a limited number of unchartered vessels to arrive, the market presents a very fair condition. There are a good many orders here in all directions, but the higher demands of owners continues to check business.

AUTOMATIC RELEASING HOOK.

A thoroughly reliable automatic releasing hook for boats davit tackle falls has long been required for use on board of all classes of vessels. In attempting to meet this positive requirement, a host of devices, each, or many of which, had some merits, have been placed upon the market from time to time, but it would appear as if the Standard Automatic Releasing Hook Co., 22-24 State street, New York, had at last filled the bill in every particular and we now find that some of the best lines on the lakes are refitting or equipping with this reliable hook for the lower block of boats davit tackles. The New York firm above mentioned have this week completed an outfit for the passenger steamers Virginia of the Goodrich Transportation Co., Chicago, who the manufacturers of these hooks make free to state, "seem to keep their ships up to date in every particular and to give their patrons a chance for their lives in case of accident." The enterprising manager of the Automatic Releasing Hook Co. recently made a tour of the lake ports and wherever the hook was shown it met with the highest approval of prac-

tical men. The hook is in use in all departments of the government and is fast finding favor in the mercantile marine as well as in fancy tonnage.

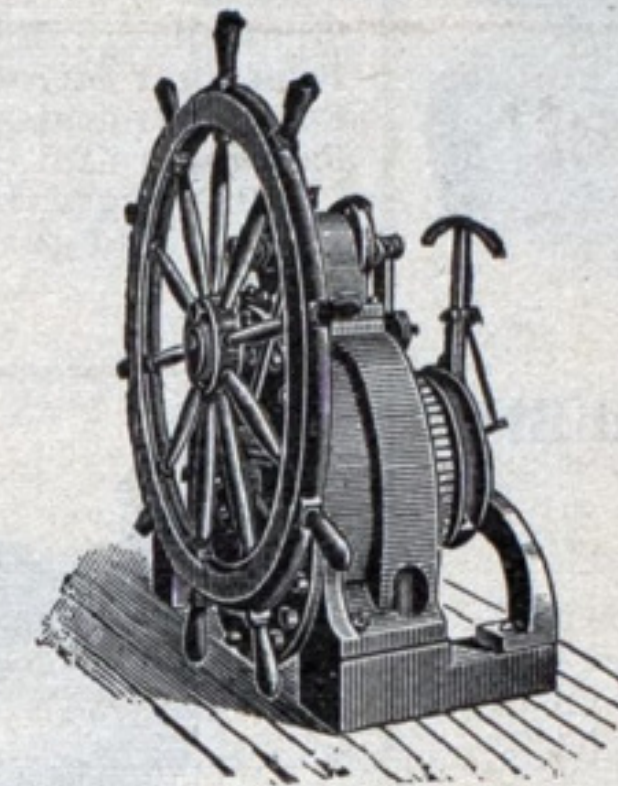
DETROIT RIVER POSTAL SERVICE.

List of unclaimed letters remaining in Marine Post-Office, Detroit, Aug. 6, 1897.
Anderson, Gus, Steamer Wm. Edwards.
Bell, Geo., Steamer Marquette.
Buir, L. L., Steamer Cormorant.
Bittle, Mrs.
Benort, J. S.
Cummins, Barney, Steamer Marquette.
Crego, Elmer G.
Cousins, W. H.
Crook, Jas. R.
Conley, Jno., Steamer Vail.
Calford, Thos. J., (Mat. Stickney Tug).
DeWitt, Jno. M., Steamer Siberia.
Dubique, Jas., Barge Tilden.
Devin, David T.
Eade, Alfred.
Kiah, Fred, Steamer Elfinmere.
Kraft, Louis.
Grammes, Jno. (2).
Gray, Robert.
Griffin, Bert, Steamer Phoenix.
Goldsmith, Lom.
Golden, H. (2).
Goldsbury, Jno., Steamer Preston.
Heiraller, V. (2). Steamer A. Wright.
Hildman, Edward, (2).
Hanvelt, Clerk Steamer Marquette.
Johnson, Mrs. W. P.
Kraber, Peter, Steamer Noosho.
Lane, Chas. E.
McGraw, Joe.
Morrison, Jno.
McHaney, A.
Morrison, Jno.
Mish, W. R.
McGarry, Chris, Steamer China.
McManneny, Archer.
Pangborn, Chas., Steamer Siberia.
Pomeroy, Geo. (2).
Perkins, H. L.
Percival, H. A.
Scott, Frank, Steamer Penobscot.

Smith, Jno., Steamer Corulia.
Shaw, John.
Stone, D. W., Steamer Esfinmere.
Thayer, A. N.
Wiechman, Miss Mary.
Williams, J. E., Schooner J. H. Rutter.
JOHN J. ENRIGHT, P. M.

The Baltimore Sun has the following mention of the old Milwaukee schooner Starke at that port: "There anchored in the harbor of Baltimore yesterday the first lake built schooner ever in this port. It was the three-masted schooner Starke, built in Milwaukee, Wis., in 1876. The Starke was bought at Milwaukee last year by Capt. Archer of Louisiana and now hails from Lake Charles, in that state. She is a typical "laker." Three masts, with tops like obsolete vessels, one of which has a squaresail upon it, and the mizzen stepped almost as far aft as a yawl's, make the Starke a picture which draws attention to her in this port, where every fore and after has much beauty aloft. Capt. Archer bought the Starke in Milwaukee and made the trip through the canals with her. Her last starting point was Quebec, which she left June 10. June 25 she passed through the Gut of Canso and made her way to Baltimore, where she will load coal for Galveston. Light the Starke draws but 4 feet of water, and with about 500 tons of coal she will not draw over 8 feet."

Queen City Hydraulic Steerer.



THE BEST AND MOST
POWERFUL STEERER FOR
TUGS, STEAMERS, ETC.

MANUFACTURED BY

Queen City Engineering Co.

BUFFALO, N. Y.

Write for Prices and References.

TOBIN BRONZE

(Trade-Mark Registered.)

Tensile strength, one inch cold drawn rod, upward of 78,000 lbs. per square inch. Torsional Strength equal to the best machinery steel. Non-corrosive in sea water. Can be forged at cherry red heat. Round, Square and Hexagon Bars for Bolt Forgings, Pump Piston Rods, Yacht Shaftings, etc. Spring Wire, Rolled Sheets and Plates for Pump Linings and Condenser Tube Sheets, Centerboards, Fin Keels and Rudders.

Ansonia Brass & Copper Co.

SOLE MANUFACTURERS,

Send for Pamphlet. 19-21 Cliff St., NEW YORK.

INCORPORATED 1794.

Insurance Company of North America

CAPITAL, Paid up in Cash,	-	-	-	-	\$3,000,000.00
ASSETS,	-	-	-	-	9,686,808.08

CHARLES PLATT, President.
GREVILLE E. FRYER, Sec'y and Treas.

EUGENE L. ELLISON, Vice President.
JOHN H. ATWOOD, Assistant Secretary.

T. HOUARD WRIGHT, Marine Secretary.

Lake Marine Department, GEORGE L. McCURDY, MANAGER
CHICAGO, ILL.

Pintsch Gas Lighted Buoys.

Adopted by the English, German, French, Russian, Italian and United States Light-House Departments for channel and harbor lighting; over 500 gas buoys and gas beacons in service.

Burn Continuously

from 80 to 365 days and nights without attention, and can be seen a distance of six miles.

Brilliant and Steady Illumination.
Economical and Reliable in Operation.

CONTROLLED BY THE

Safety Car Heating and Lighting Co.,

160 Broadway, NEW YORK CITY.

MARINE AND INLAND INSURANCE.

Atlantic Mutual Insurance Co.

Organized 1842.

Office 51 Wall Street, NEW YORK

Insures against Marine and Inland Transportation Risks and issues policies making Loss Payable in England.

Assets over \$10,000,000 for the Security of its policies.

The profits of the Company revert to the assured, and are divided annually upon the premiums terminated during the year; thereby reducing the cost of insurance. For such dividends, certificates are issued bearing interest until ordered to be redeemed, in accordance with the charter.

A. A. RAVEN, Pres.

F. A. PARSONS, V. P.

CORNELIUS ELDERT, 2d V. P.

THEO. P. JOHNSON, 3d V. P.

J. H. CHAPMAN, Sec'y.

NEW YORK.
PHILADELPHIA.
BOSTON.

BALTIMORE.
SAN FRANCISCO.
NEW ORLEANS.

Johnson & Higgins,



Average Adjusters,
And
Fire and Marine
Insurance.

Special Facilities for Placing Marine Lines.

Guaranty Bldg., BUFFALO, N. Y.

LONG LIFTS

SELLERS' RESTARTING INJECTOR

HOT WATER

SIMPLEST AND BEST

WIDE RANGE

LONG SERVICE

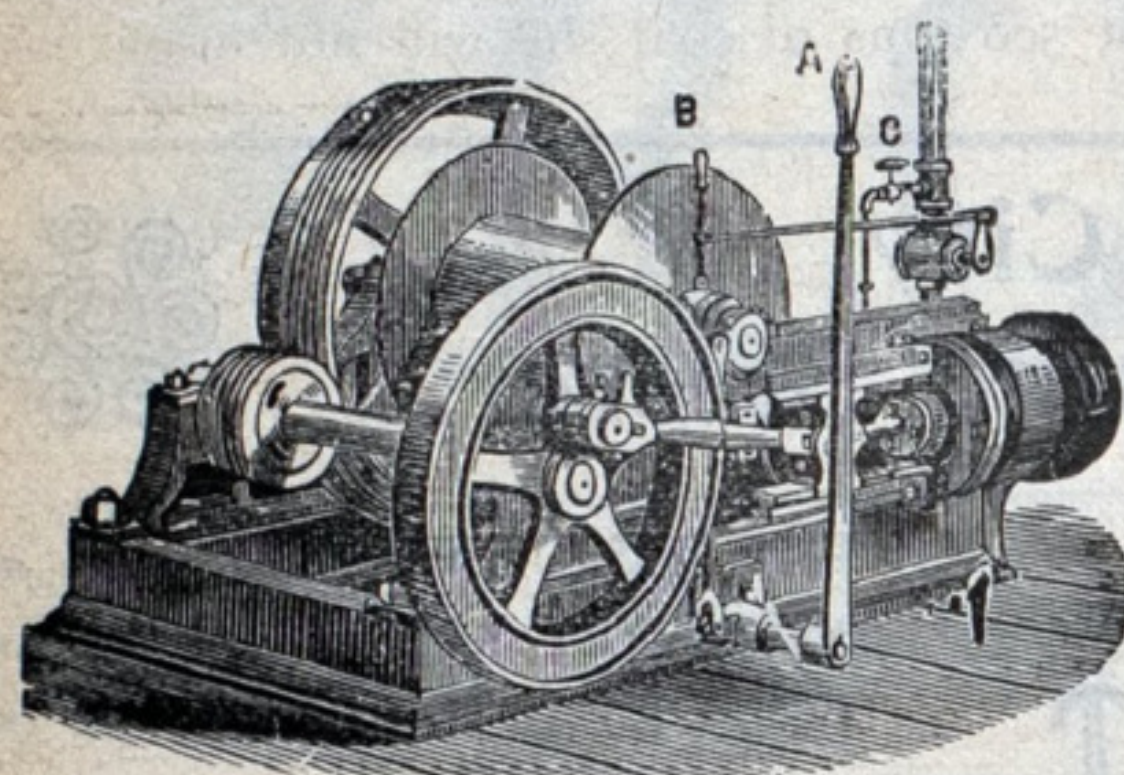
For Stationary, Portable, Traction Engines, Tugboats, &c.
Thoroughly Reliable—Perfectly Automatic.
JENKINS BROS. - Selling Agents,
NEW YORK, BOSTON, PHILA., CHICAGO.

A. J. MORSE & SON.

CONGRESS ST. BOSTON.

WILLIAMSON BROS.,

COR. RICHMOND AND YORK STS.,
Philadelphia, Pa.



HOISTING ENGINES and SHIP
STEERING ENGINES.



With either Fractional, Spur or Worm Gear of
Various Patterns to Suit all Purposes.

ESTABLISHED 1871. INCORPORATED 1893.
Montague Iron Works Co.

MANUFACTURERS OF

Marine and Stationary Engines AND BOILERS OF ALL KINDS.

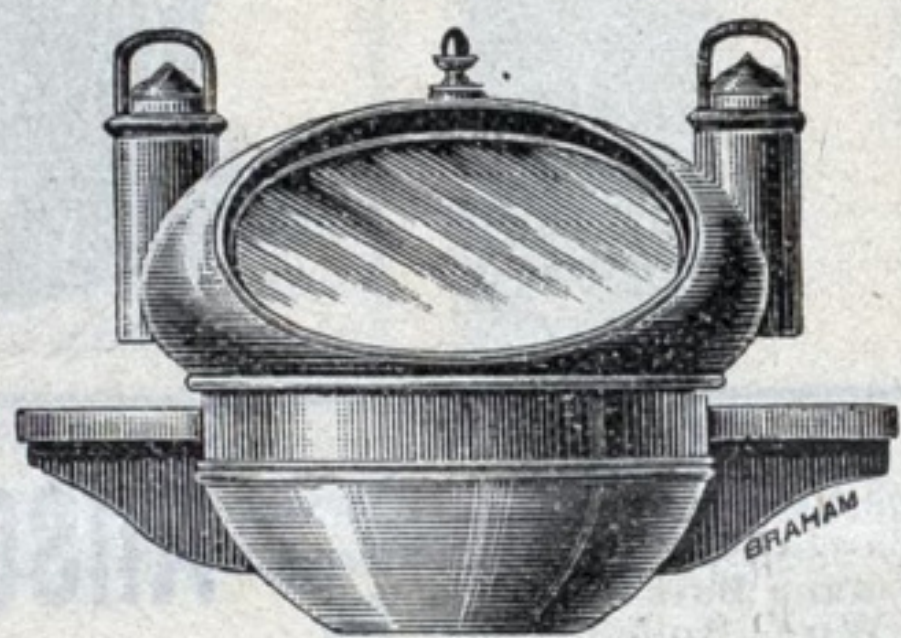
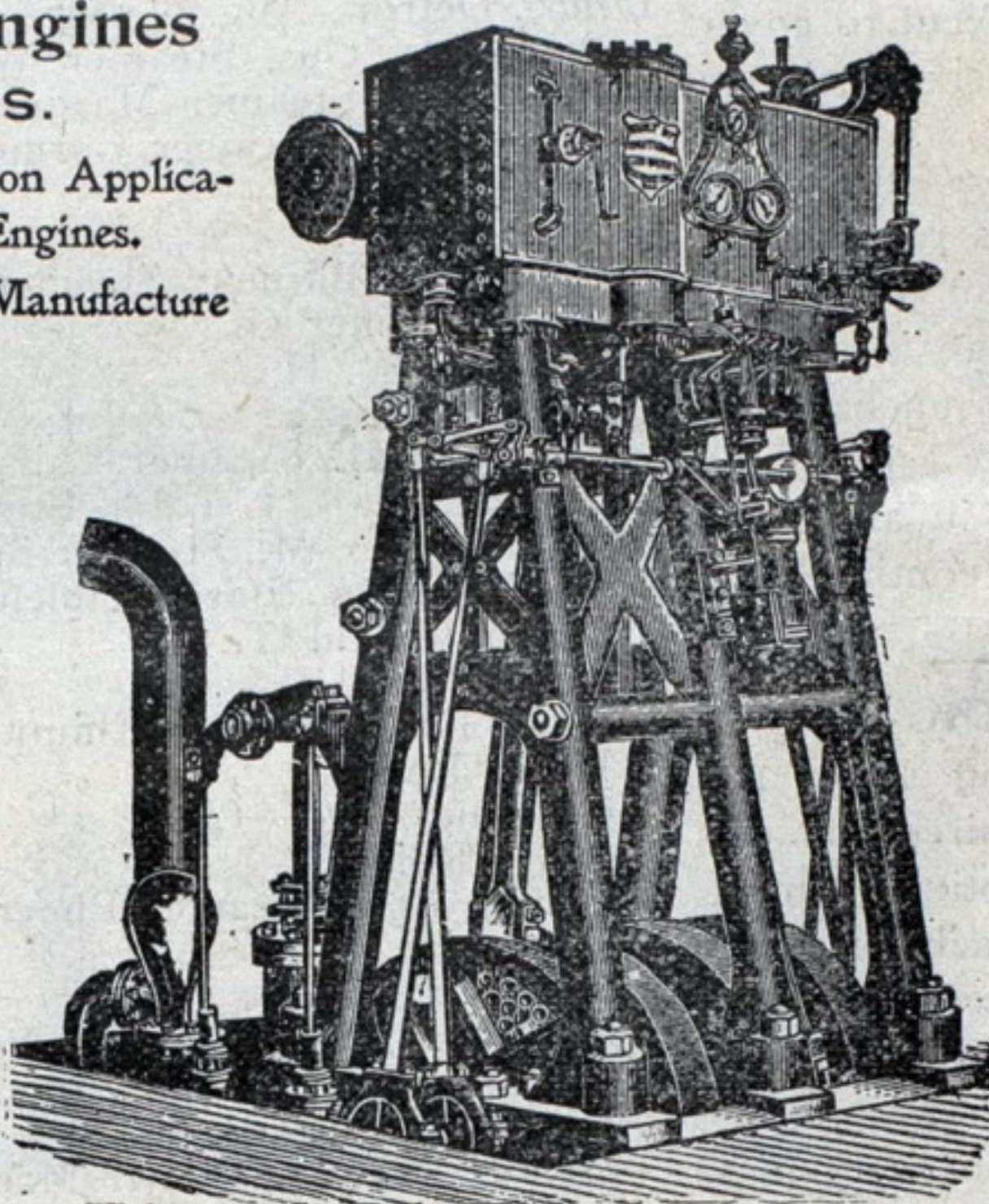
Heavy Castings a Specialty. Prices Quoted on Application. Fore and Aft Compound Marine Engines.

The Engines in the following boats are of our Manufacture

Tug Hunter, Chicago, 15 and 28x22.
 Tug Tacoma, Chicago, 16 and 30x24.
 Tug Zenith, Duluth, 18 and 36x30.
 Steamer Glenn, South Haven, 14 and 28x20.
 U. S. Survey Steamer, W. S. Hancock 12 and 21x20.
 Steamer Pine Lake, Charlevoix, 16 and 30x24.
 Passenger Steamer Pilgrim, St. Clair, 14 and 28x20.
 Steam Barge Iona, Grand Haven, 24 and 46x42.
 Steam Barge M. T. Greene, Chicago, 20 and 36x36.
 Steamer H. W. Williams, South Haven, 18 and 36x30.
 Steam Barge Mark B. Covell, Manistee, 18 and 30x26.
 Steam Barge Isabella J. Boyce, Michigan City, 19 and 32x26.
 Steam Barge Luella H. Worthington, Cedar River, 19 and 36x30.
 Passenger Steamer City of Kalamazoo, South Haven, 20 and 40x30.
 Steamer Oval Agitator, Chicago, 14 and 28x20.
 Tug E. G. Crosby, Muskegon, 16 and 30x24.
 Tug Peter Coates, Sault Ste. Marie, 10 and 20x16.
 Steamer Lorain L., South Haven, 12 and 21x16.
 Passenger Steamer Lotus, Escanaba, 16 and 30x24.
 Steam Barge Sachem, Grand Haven, 21 and 38x36.
 Passenger Steamer Bon Ami, Saugatuck, 14 and 28x20.
 Steam Barge Charles A. Street, Chicago, 20 and 36x36.
 Steam Barge Edward Buckley, Manistee, 18 and 36x30.
 Passenger Steamer E. G. Maxwell, Pentwater, 14 and 28x20.
 Passenger and Freight Steamer Bon Voyage, Saugatuck, 16 and 30x26.
 Passenger and Freight Steamer Mabel Bradshaw, Muskegon, 26 and 28x26.

The engraving represents our 20 and 36x36 Fore and Aft Compound Marine Engine. We build them all sizes and guarantee them to give satisfaction. Prices furnished on application.

MONTAGUE IRON WORKS CO., Montague, Mich.



FRANK MORRISON,

Compass Adjuster
 and manufacturer of
 Nautical Instruments
 Compasses, Barometers, Patent Logs, Binnacles, Steam
 Gauges, Marine Glasses, Engine Indicators.

All Nautical Instruments Carefully Repaired.

OFFICE WITH UPSON, WALTON & CO., 161 RIVER ST., CLEVELAND, O.

Marine Engines.

SINGLE and
COMPOUND.

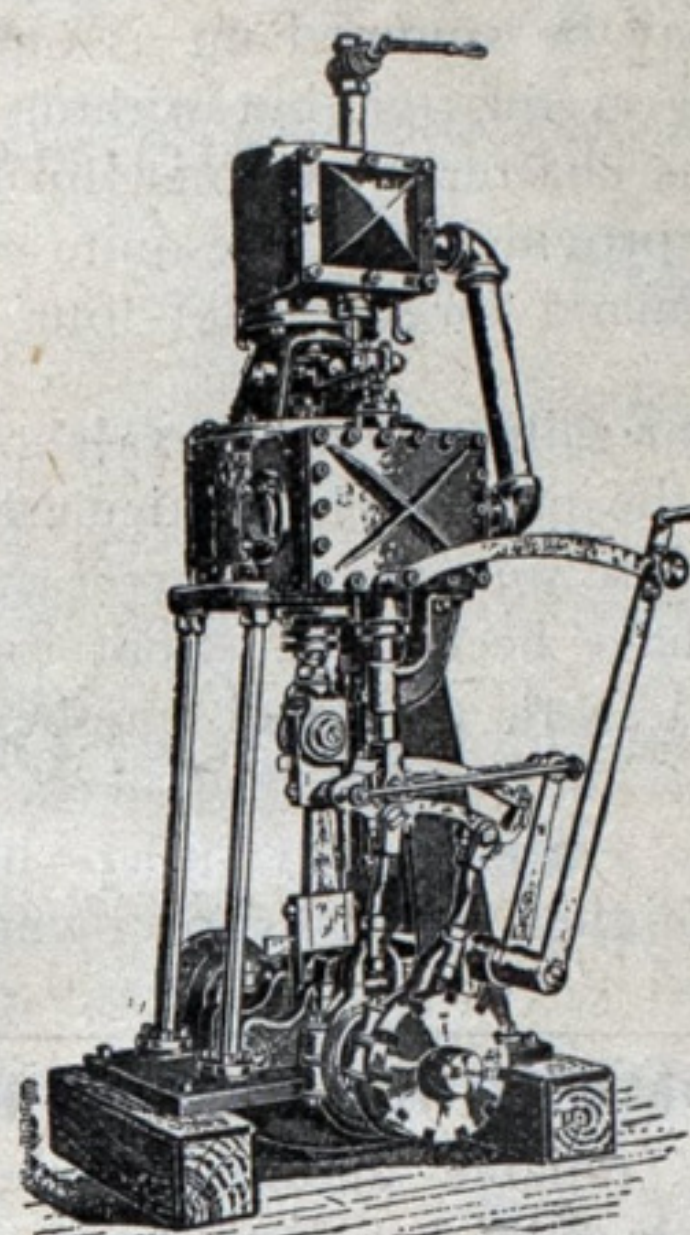
5 to 200 HORSE
POWER. These en-
gines are high-class
in workmanship and
material and moder-
ate in price.

Send for cuts, de-
scription and prices.

Centrifugal Pumps

For raising coal,
sand, etc. For dredg-
ing, wrecking, and
circulating.

Write for cata-
logue.



MORRIS MACHINE WORKS,
Baldwinsville, N. Y.

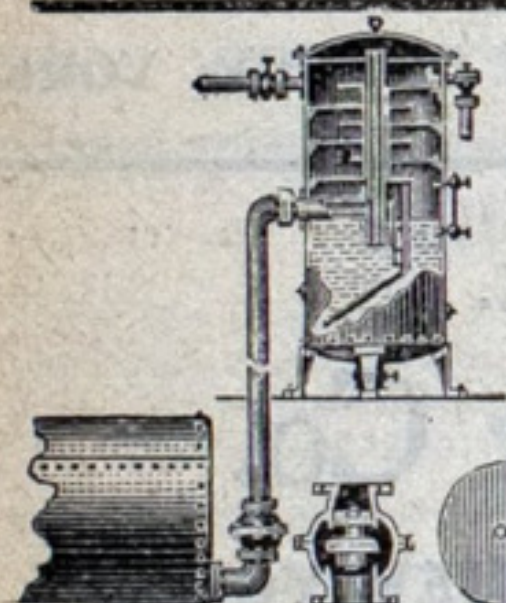
HENION & HUBBELL, Agts, 61-69 N. Jefferson St.,
Chicago, Ill.

ABRAM SMITH. ANGUS H. SMITH.

Abram Smith & Son, SHIPBUILDERS, ALGONAC, MICH.

WOODEN SHIPS
OF ANY DESCRIPTION
BUILT, REBUILT or
REPAIRED.

Send for Specifications, Prices, Etc Good
Slips for laying up boats.



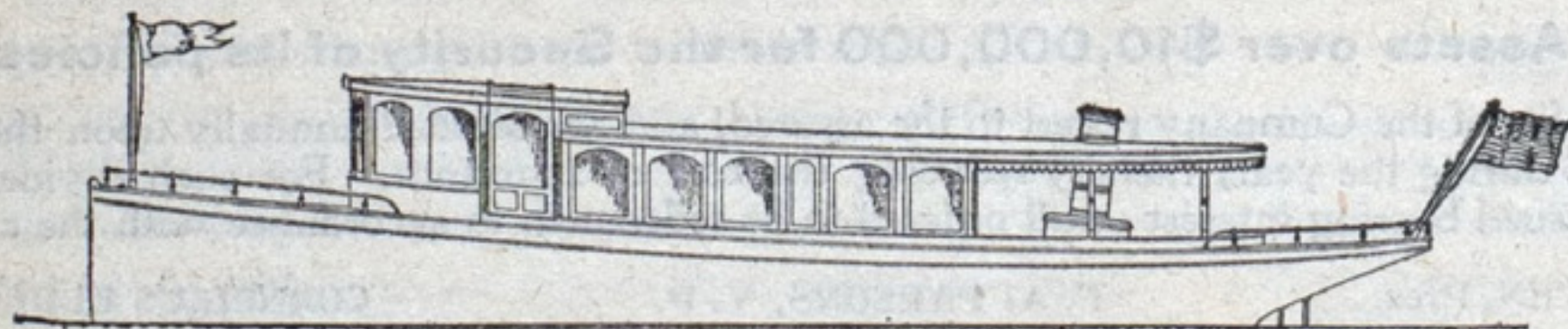
Buffalo Feed Water Heater AND PURIFIER.

Made in all Sizes and to Suit all Conditions.

ROBERT LEARMONTH,

Send for Catalogue. 200 Bouck Ave., BUFFALO, N. Y.

Boats for Amateur Builders.



All designs shown in my new "ALBUM OF DESIGNS" to scale as indexed or enlarged full size very cheap. SPECIAL DESIGNS TO ORDER. Patterns, Moulds and Instructions to Amateur Builders. Small Steam and Sailing Craft Built and Rigged entirely or in part. Stems and Stern Posts, Keels, Frames furnished worked in the wood. All kinds of boats set up in frame and shipped "knockdown" to any part of the world.

SEND 50 CENTS FOR 72-PAGE "ALBUM OF DESIGNS."

FRED W. MARTIN, Yacht Designer, North Chicago, Ill., FORMERLY RACINE, WIS.

The Cuddy-Mullen Coal Co.

Miners and
Shippers of **STEAM COAL**

FUELING DEPARTMENT
FACILITIES.

CLEVELAND HARBOR.—Car Dumper; Eight Pockets, 1000 Tons Capacity; Lighter
Steam Derricks.

DETROIT RIVER BRANCH.—Amherstburg; Four Pockets; Three Steam Derricks;
SANDWICH—Ten Pockets and Two Steam Derricks.

"SOO" RIVER BRANCH.—Two Docks, (Formerly known as the Anthony and Watson
Docks,) Equipped with Pockets and Steam Derricks.

GOOD
COAL.

COURTEOUS
ATTENTION

QUICK
DISPATCH.

General Offices, Perry-Payne Bldg., Cleveland, O.

Youghioghenny River Coal Co.,

MINERS AND SHIPPERS OF



OCEAN MINE,
YOUGHIOGHENY GAS
AND STEAM COAL.

General Office: Erie, Pa., Long Distance 'Phone 409.

Shipping Docks: Ashtabula, O., Long Distance 'Phone 76.

Vessels fueled at all hours with Ocean coal only, by Steam
Lighter, Car Dump or Derricks. Electric Light.

The Electro-Dynamic Co.

224 Chestnut St., PHILADELPHIA.

ELECTRICAL ENGINEERS and Manufacturers of ELECTRICAL MACHINERY.

Complete Light and Power Plants for Towns, Office Buildings, Railways and
Private Houses.

COMPLETE ELECTRICAL MARINE EQUIPMENTS

Installed on St. Louis, St. Paul and other steamers of the American Line, making a total of
twenty-two direct coupled dynamos aggregating about 15,000 lights. Complete
Lighting Plants on Yachts Columbia, Thespia, Rambler, Enterprise
and others.

Portable Electric Drill Motors now in use at Cramp's Ship Yard, Union Iron Works, Newport News
Ship Yard, Brooklyn Navy Yard Crescent Ship, Yard Pennsylvania Railroad.

MARINE SPECIALTIES.